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JOURNAL OF THE WIRELESS INSTITUTE OF AUSTRALIA

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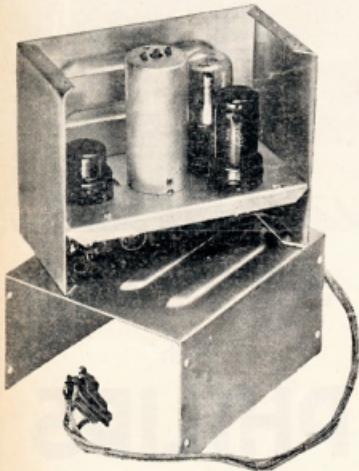
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EDITOR:

T. D. HOGAN, VK3HX,
Telephone: UM 1732.

MANAGING EDITOR:

J. G. MARSLAND, VK3NY.

TECHNICAL EDITOR:

J. C. DUNCAN, VK3VZ.

COMPLICATION:

R. W. HIGGINBOTHAM, VK3RN.

DISTRIBUTION:

H. N. STEVENS, VK3JO.

ADVERTISING REPRESENTATIVE:

W. J. LEWIS,
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AMATEUR RADIO

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EDITORIAL



In this month's Federal Notes you will find a brief resume of the activities at the Federal Convention where the few did so much for so many. Whether the many will approve of the work performed by the few remains to be seen.

One of the major tasks allotted to Federal Executive for the forthcoming year is that of preparing a "Uniform Divisional Constitution." This is going to be a gigantic task as it is necessary to take into consideration both the wide variations in Companies Act in each State, and the diversity of existing Divisional Constitutions. One thing stands out very clearly, before a uniform divisional constitution can be agreed upon each and every division will have to make generous concessions.

Unfortunately we are living in a world filled with suspicion and motivated by selfishness; hence we are all biased by our environment and find it difficult to believe that the other fellow is actuated by honest motives.

It is obvious that before true Federation can exist members will have to delegate sufficient discretionary powers to Divisional Councillors, Federal Councillors and Federal Executive to make any scheme workable.

The present basis under which executives of the Institute are fettered and hampered by the cumbersome process of securing

approval step by step from members generally is both unsound and unworkable. It is not suggested for one moment that you as a member give anyone a blank cheque; but rather that everything be viewed in its correct perspective. If you have sufficient faith in your own judgement in electing the right men, then surely you can trust those men to perform the task faithfully during their term of office.

The other stumbling block which must be removed to make way for Federation is "Interstate Jealousy." The continual fear by one State that another will encroach upon its precious preserves. This outlook reeks of medieval times when Barons were wicked old gentlemen who lived in castles surrounded by watery moats, and does not in any way fit in with the radio picture wherein is envisaged, upon a broad canvas, the complete elimination of boundaries, prejudices and racial differences, based upon the better understanding promoted by the penetration of the common interests of Hamdom into the far corners of the earth.

The moral of this story is — can we rise far enough above our present environment and past prejudices to make FEDERATION a concrete fact instead of an idealistic dream. The ball is in your corner!

G.G.

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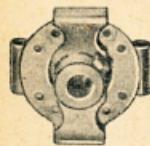
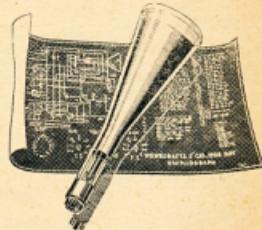
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SERIES PHASED AERIAL ARRAYS

By H. K. LOVE*, VK3KU

So much has been written on the subject of Directive Arrays, that one hesitates to step into this field unless it is to offer a summary of experience which may clear up some of the confusion which exists. An examination of the published data on Parasitic Arrays, for example, shows a great variety of claims for gain above a dipole. Some of these claims are fantastic, and some conservative.

The important feature from the Amateur's point of view is that all types of Parasitic Beams work in some fashion. It is feared that some of the information on this type of beam has its genesis in unbounded enthusiasm, brought about by the fact that the author has been fortunate; his location and all the other factors have been favourable, and his results excellent. We all fall into this trap at some time or another—it is the "Ham" in us!

It is no wonder, then, that when results are not as good as we expect, some of us are disappointed. The reason can, as a rule, be traced down to some unfavourable factors which were not present in the enthusiastic author's case.

There are a number of factors which govern the operation of Parasitic Arrays—some of them are as follows:—

- (a) Location.
- (b) Height above ground.
- (c) Nature and proximity of surrounding objects.
- (d) The ability to accurately tune the array.
- (e) The method of feeding.

Some very interesting and accurate engineering data on the subject of Parasitic Arrays is found in the Radio Engineer's Handbook (Terman) beginning on page 809, para. 17.

In the main, this paragraph deals with a simple driven element, and a Director or Reflector. Examination of the figures on page 810 will reveal just how slight changes in tuning or spacing will affect the pattern.

After reading this data the Amateur will begin to look around his location and count the tin roofs and other obstructions in an endeavour to learn what chance he has of getting out in the right direction, if the antenna is pointing in that direction.

All this wordy preamble is to indicate that what the other fellow has done with a 2, 3 or 4 element beam of the parasitic variety, cannot always be repeated in another location. One may still persist and do a very nice job on such an array, but there is always the feeling that with a little more tuning and adjustment, better results **might** be obtained. One cannot help wondering if those non-driven elements are doing their stuff!

Keeping the series idea in mind as the first fundamental, let us add some other desirable features as under:—

- (a) Compactness.
- (b) Flatness of tuning on the Ham bands.
- (c) No critical tuning.
- (d) Substantial gain.
- (e) No adjustment, and easy to feed.
- (f) Correct phasing to achieve directivity.
- (g) All elements in series, and therefore all excited.

These features—(a) to (g)—are the story of the Series Phased Beam as applied to Amateur practice.

The following quotation, extracted from Messrs. Ladner & Stoner's "Short Wave Wireless Communication" will start one thinking on this type of array:

THE MARCONI FRANKLIN SERIES PHASED ARRAY†

Such is the full name of the beam about to be described. If one took a huge loop of wire, say a wave length or so long, set it out in a circle and fed both ends from the transmitter tank, provided it was resonant and drew current, there would be little fear in the mind of the operator that the r.f. was not in all parts of the wire, because the whole loop is in series.

It is not, however, convenient to mount and erect such a contraption, but the series characteristic can be retained by another method.

†"Short Wave Wireless Communication" by Ladner & Stoner.

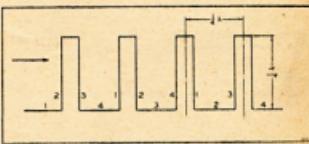
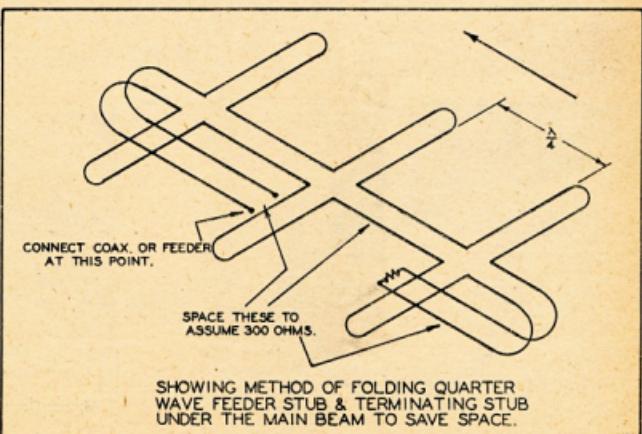


Figure 132

dimensions of the loops and the spacing being dependent upon the type of diagram required. In general, the most commonly adopted arrays are made with loops approximately one-quarter wave-



SHOWING METHOD OF FOLDING QUARTER WAVE FEEDER STUB & TERMINATING STUB UNDER THE MAIN BEAM TO SAVE SPACE.

*Virginia Street, Mt. Waverley, Victoria.

length long spaced a similar amount, the length of the array line being dependent upon the directivity desired. An array line will be fed from one end, usually through a short length of non-radiating feeder coupled to a normal concentric tube main feeder, the remote end of the array generally being terminated by a resistance equal to the characteristic resistance of the system, which approximates to 300 ohms.

"As will be seen later, the loops perform two separate functions; to act as radiators, and what is as important, to determine the time phase of current between loops.

"Consider an earthed vertical single wire aerial. When excited from the base, a stationary wave is formed, by a wave W_1 travelling up the wire, and a similar reflected wave W_2 travelling back. We could imagine wave W_1 travelling up the left hand edge of the wire, and the same travelling wave returning down the right hand edge of the wire, and because at all intervals of time the instantaneous values of the current waves I_1 and I_2 at the top are equal but opposite in direction, they form a node of current here.

"At other points down the wire the instantaneous amplitude of I_1 and I_2 are not always equal, and if their values are traced out in time they will be found to form a stationary wave with current antinode at the base when the wire is one-quarter wave length long. However short or long this wire may be, a stationary wave will be formed by these two travelling waves with a node of current at the top end and current value at the bottom appropriate to the length of wire. Accompanying the current stationary wave is a voltage wave in quadrature time phase with it and with an antinode at the top end.

"If instead of providing a single wire we provide a loop of wire, Fig. 133, fed at the lower end, 'A' say, this loop being part of a circuit in which a travelling wave is flowing, the wave will now travel up one wire 'AB' and return by the second 'BC' from which it continues on in the circuit, but provided these wires are sufficiently close together to be regarded as coincident in space from a radiation point of view, the loop may

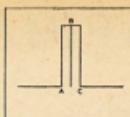


Figure 133

be regarded exactly as a single wire carrying a stationary wave with current node at 'B'. These two travelling waves not only form a stationary wave of current with node at top end and (if the loop is $\frac{1}{4}\lambda$ or at the bottom end) in quadrature time-phase with the effective current stationary wave there will be a voltage stationary wave, having an antinode at the top end and a node at the bottom end. The voltage does not reverse in sense at the top, and in consequence, no node is produced, whilst at the bottom of the loop voltages are always equal but opposite in phase.

"The radiation resistance of the loop will be four times the radiation resistance of a single wire for the same base current measurement in each case. This is so because a meter placed at the base of one limb of the loop is measuring current in one limb only, and this is half the effective stationary wave current at the base, as the currents add to this point. This means virtually that the effective height, and in consequence the radiation efficiency of this portion of such a system is high. For this reason, an array built with loop radiators is equally suitable both for transmission and for reception purposes."

Messrs. Ladner & Stoner deal, in the main, with the "Series Phase" as a commercial curtain, and cover the maths. and theory considerations fully. It is the purpose of this article to summarize the application of this system to Amateur use. At VK3KU the beams for 28, 50 and 144 Mc. are all series phase, and on 28 and 50 Mc. have done a wonderful job. It should be remembered that no tuning or adjustment has been done on these beams—they simply work!

It will be seen that Fig. 132, ex Ladner & Stoner, forms the basis of construction of Fig. 1—the Amateur application for 28 Mc.

The beam construction for Amateur use is two beams mounted horizontally—see Fig. 1.

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"The loops, therefore, perform two separate functions; to act as radiators, and what is as important, to determine the time phase of current between loops.

A further extract from Ladner & Stoner will make this clear:—

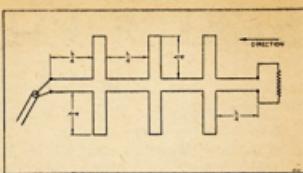


Figure 1

As the loops on each side of the beam represent a $\frac{1}{4}$ wave out and $\frac{1}{4}$ wave back, each loop is $\frac{1}{2}$ wave length, and this, added to the corresponding loop on the opposite side, makes each element a folded full wave. Since all loops are in series, each is excited.

The loops, therefore, perform two separate functions; to act as radiators, and what is as important, to determine the time phase of current between loops.

The loops, therefore, perform two separate functions; to act as radiators, and what is as important, to determine the time phase of current between loops.

"Consider Fig. 134 (a), which shows two radiators 1 and 2 spaced one quarter wave length apart and connected by a feeder line. If this system is fed from a point 'A', half-way between the aerials, zero time phase is supplied to both aerials, but if we move the feed point to 'B', this automatically creates a time phase difference between 1 and

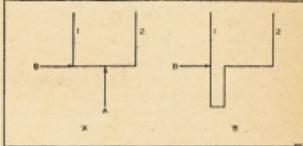
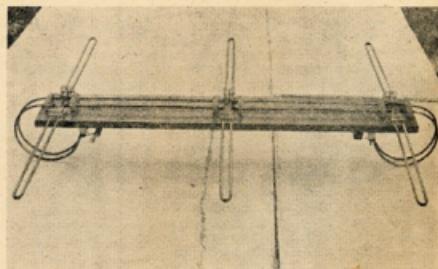
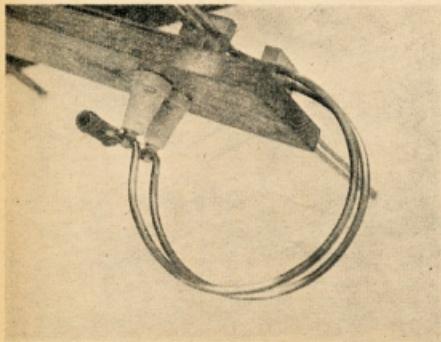


Figure 134
2, equal to the space phase between them, assuming the radiated wave travels to the right at the same velocity as the wave along the feeder. In this case maximum directivity is away from the feed point 'B'.

"Still keeping the feed input at 'B', we can reverse the diagram by looping the feeder to give aerial 2 a lagging



Above: Complete Series Phased Three Element Beam for 144 Mc. showing Stubs turned under.

At left: Terminating Stub on 144 Mc. Series Phased Beam.

current of 90° . To do this the feeder length can be increased as shown in Fig. 134 (b), such that it equals $(360^\circ - 90^\circ)$ or $\frac{1}{4}\lambda$. If we design the loop to have $\frac{1}{4}\lambda$ sides as shown, this loop, together with the straight portion of $\frac{1}{4}\lambda$, makes up the $\frac{1}{4}\lambda$, and as we have seen, if the sides of the loop are coincident in space, the loop itself will act as a radiator; in consequence, we can use it not only as a phasing feeder to aerial No. 2, but to replace aerial 1. In a similar way the whole line of radiators can be replaced by loops, whose lengths are made correct to produce the required phasing between the radiating elements. This is the usual series-phase array design which therefore has maximum directivity from its feed end, and it is clear that with this particular spacing we could not reduce the dimensions of the loops sufficiently to reverse the diagram, i.e., by producing a time phase equal to the space phase as the loops would then have zero dimensions.

"But we can obtain this reversal by increasing the loop still more, namely to $\frac{1}{2}\lambda$, as in this case the total feed length is then $\frac{1}{4}\lambda$, and this gives the required time phase."

It is not intended, here, to go further into the theory of this type of array, as Messrs. Ladner & Stoner have treated this at great length. It is therefore intended to give some pointers on the construction of a Series Phased Array for the practical Amateur bands.

The beam is practicable on the 14, 21, 28, 50 and 144 Mc. bands. The dimensions are easy to compute by any formula for $\frac{1}{4}$ wavelength. It has been found that the beam is very suitable to work over quite wide areas of the bands, with little loss of efficiency, and on this account the intending user is advised to cut the $\frac{1}{4}$ wave sections for a frequency at the centre of his operating frequencies. The $\frac{1}{4}$ wave stubs for feeding and termination can be folded back under the framework of the beam, and accordingly do not add to the length of the structure. The $\frac{1}{4}$ wave feeder is made up of open line, with spacing and conductor diameter to make a 300 ohm line. This can be done with tubing or wire, provided the spacing is suitably adjusted to 300 ohms.

The loops or elements are best made of $\frac{1}{2}$ " tubing, or can be wires folded back round insulators if desired.

It will be seen that for 14 Mc. a two element beam is not by any means too big. Such a two element affair will have

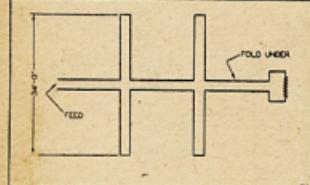


Figure 2
four driven $\frac{1}{4}$ waves and will occupy approx. 34' x 17' 6" (Fig. 2). A three element for 28 Mc. (6 half waves) will take a space of about 17' x 16'.

The method of mounting the elements on a wooden frame, whether it be a tubing structure or wire, is left to the intending user.

The spacing between centres of the folded back tubes or wire should be quite close; in the case of tube, a space not in excess of $\frac{1}{2}$ " between the adjacent walls will be about right. If wire is used, a space of approx. $\frac{1}{2}$ " between centres of the wire will do well—but care should be exercised when the construction is designed that the wires are held apart and do not touch in a high wind. Liberal use of insulators or small spreaders should serve well to achieve this.

The Termination.—The beam may be left bi-directional if desired, or made uni-directional by terminating resistor of 300 ohms of a non-inductive type.

The Beam In Use.—The feeder can be almost any type of line—open or co-ax,—and the feeder stub, which is 300 ohms $\frac{1}{4}$ wave, will take care of the matching to the array in much the same manner as Q bars. Should 300 ohm line or cable be available, this may be used right down to the transmitter tank.

Results obtained with this beam indicate that it does a first-class job. There are numbers of beams—the description of which, together with the theory and data, would tempt some of us to endeavour to use them, but unless one has the facilities to ensure perfection of the theory, it may be better to leave them alone.

When all is said and done, most of us are after R5 reports, and we also like something round the S9. With the limited power the Australians use, the S section of our reports must come from getting as much of the r.f. from the tank into the flat top as possible.

The improvement of our signal strength from, say, S6 by power increase

can be expressed in the following terms: To raise an S6 signal to S6.5 requires that we multiply the power by two. To increase our signal by one S unit, i.e., 6 db. to S7, the power would need to be multiplied by four. One can go on doing sums like this to see how many times the power must be increased to gain the additional signal points, but it is the power that reaches the flat top which does the job.

If equipment is arranged with 100 watts input to give 60 watts output in the tank, all well and good, but if only 15 of the watts reach the radiator, we are not getting very far. What we all desire is the use of as much of that 60 watts as possible in the radiator—pushed in the desired direction—that of the receiving station.

TIPS FOR PRACTICAL CONSTRUCTION

It is strongly recommended that the beam be fabricated of $\frac{1}{2}$ " copper tubing in the case of 28 Mc. beam, or $\frac{1}{4}$ " copper tubing in the case of 50 Mc. beam.

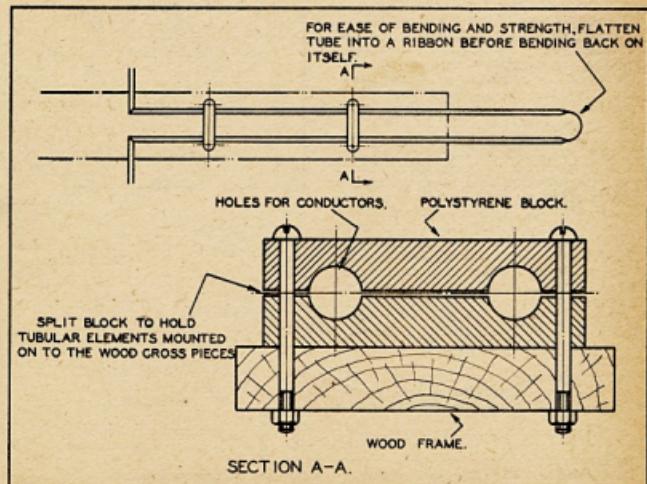
Reference should be made to "Amateur Radio," July, 1947, page 5, for the impedance versus spacing diameter curve for conductors to ensure that the quarter waves between the elements are arranged to assume an impedance of 300 ohms.

The folding back of each element which is a half wave folded back on itself, should be accomplished by hammering it flat at the centre point which makes an easy method of bending and strengthens the whole job, as instead of being a bent tube it is a ribbon of flat metal.

The builder is advised to braze the tubing into one solid grid to ensure that the beam is in complete electrical contact throughout its length.

The method of mounting is to make a

(Continued on page 8)



The BC696 and BC457 Transmitters

By F. M. NOLAN*, VK4FN

The BC696 and BC457 Transmitters can be very simply converted to make excellent v.f.o.'s for the Amateur bands. Before commencing the description of the alterations necessary to convert for Ham use by VK4FN, the following description of the units is reprinted from "CQ," May 1946, to acquaint the reader with their operation.

An increasing amount of surplus Army equipment is appearing on the civilian market. Among various items of interest to the Radio Amateur is the SCR274N, an aircraft unit that is very easily adapted to Amateur use as a stable, variable-frequency oscillator (v.f.o.), either for a.m. or f.m. operation. The SCR274N is the overall designation given the principal components of a multi-channel aircraft radio receiving and transmitting set-up used on thousands of planes and now "declassified." So that the reader may know what to look for, the army numbers of the equipment are as follows:—

The receiving end consists of three separate units—the BC453 (190-550 Kc.), the BC454 (3 to 6 Mc.) and the BC455 (6 to 9.1 Mc.). These receivers operate from the aeroplane 24-28 volt storage battery and each contains a separate dynamotor for plate power. It is an easy matter to substitute 6 volt tubes for the 12 volt series type originally in the receiver, and re-wire the filament string for parallel 6.3 volt operation from a standard filament transformer. (Alternatively, a 24 volt transformer may be used to energise the heater circuits with the receiver left as is.) Any light 250 volt receiver power supply will provide plate power for the sets, or a vibrator pack may be used if mobile operation is contemplated. These receivers are very sensitive, incorporating an r.f. stage, b.f.o. for c.w. reception, and, all in all, make excellent receivers up to approximately 10 Mc.

Four separate transmitters are included in the sending unit. The BC696 covers 3 to 4 Mc., the BC457 from 4 to 5.3 Mc., the BC458 5.3 to 7 Mc., while the BC459 tunes from 7 to 9.1 Mc. Each transmitter consists of a master oscillator tube (1626 or 12J5) exciting a pair of beam tetrodes in the power amplifier stage (1625 or twelve volt 807s). The tubes in the amplifier are connected in parallel. The master oscillator and r.f. power amplifier tuning capacitors are ganged, and an excellent worm drive, with plenty of reduction, is incorporated in the dial system. Included in each transmitter is a piezo-electric crystal and an electronic resonance indicator for calibration.

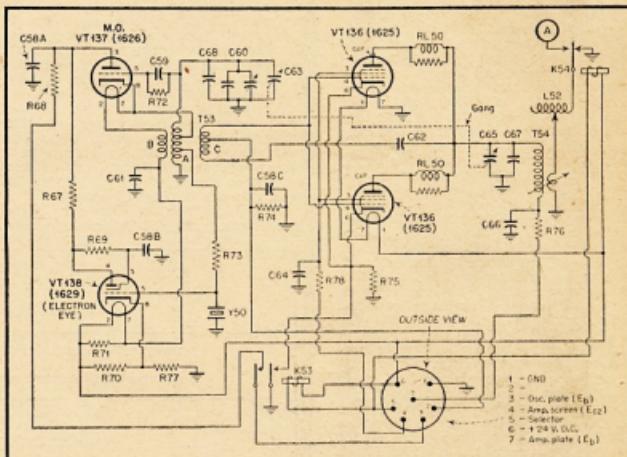
The power output may be varied from a few watts to approximately 55 watts according to the power supply on hand. Thus, one of these little jobs may be used as a fixed variable-frequency

transmitter or as a driver for a higher power amplifier.

The components are of exceptionally high quality and the assembly rigidly constructed. With a stabilised 200 volt supply to power the master oscillator, the drift is very small. This equipment was designed to hold the frequency quite constant in aircraft under vibration and extreme temperature changes; so it can be understood that the frequency variation will be practically nil with the set mounted on the operating table, subject to little vibration and relatively constant temperature.

A power supply, preferably a regulated 220 volt unit, is used to power the master oscillator—while anything from 200 to 550 volts, unregulated, is suitable for the amplifier, depending on the desired power output.

The dial is very closely calibrated and a crystal resonator is used to check the calibration. This is very simply observed by tuning for maximum indication on the electronic eye tube and then noting if the dial reads exactly the crystal frequency. The transmitter is then calibrated over the rest of the dial. This crystal does not stabilise the frequency in any way—it is merely a built-in standard to check the master oscillator dial setting. A crystal of another frequency could be substituted—for instance one spotting a particular net or operation frequency. This would enable the operator to place himself exactly on a particular frequency in the band.



RE-WIRING TO USE AS V.F.O.

A number of members have procured either the BC696 or BC457 Transmitters from Disposals, and desire to use them for v.f.o. operation, and it is proposed here to outline the steps taken by the writer to put them in operation as v.f.o. units.

Being fortunate enough to have access to a handbook on the SCR274N equipment, of which these units form part, a study was made of the circuit details from which was learnt that the oscillator coil has three windings (see Fig. 1), one being the usual electron coupled oscillator winding which is tapped and connected through a resistance to the grid of a magic eye tube which is used as a crystal oscillator for calibration purposes. Another winding couples the output of the oscillator to the p.a. tubes which are connected in parallel, this winding being centre-tapped, one side going to the grids of the p.a. tubes and the other to the neutralising condenser, while the centre-tap returns through a bias resistance to earth. The third winding is placed in series with the heater of the oscillator tube.

To make the alterations necessary for use, turn the chassis upside down with the oscillator tube and magic eye to the rear. On the left-hand 1625 tube socket pin No. 1 has three white wires connected to it. One of these can be seen going to the front of the unit, one towards the rear and the third towards the right-hand side. Disconnect the wire going to the front of the unit and also the one to the right and connect

both to socket connection 2 which is spare.

From pin 7 of this same socket disconnect the white wire and reconnect to pin 1, from which the two other white wires were removed. Next bridge pins 2 and 7 together and run a wire across to pin 7 of the right-hand 1625, this change having placed the heaters in parallel and completed the circuit for the control relays which control the h.t. and stand-by circuit as well as the antenna switching which is the output terminal for the new v.f.o.

Place the oscillator and magic eye heaters in parallel disconnect and remove the resistor mounted on the rear wall of the chassis at present connected to pins 2 and 7 of the magic eye. Disconnect also the 4 watt resistor connected between pins 2 and 8 of this tube, and remove the white wire from pin 7 of the socket and re-connect to bottom left-hand pin of the power socket (pin No. 6). Now bridge pins 1 and 7 of the magic eye socket and earth to chassis. This completes the work under the chassis leaving a few alterations "upstairs."

Remove the antenna coil and from the connection on the tank coil where the T.C.C. wire from the antenna coil was connected and run a new wire to the antenna terminal via the relay contacts. The needs of individuals may be varied at this point. At 4PN the antenna terminal was removed and a co-ax connector substituted, also the relay contacts were not used.

All that remains is to connect a power supply to the socket, with 12 volts d.c.

via switch to pin 5 of power plug to operate relays and the unit is ready for operation, the rest of the supply being 12 volts a.c. for the heaters, 250 volts d.c. to the plates of the 1625s, 200 volts to the screens and 105 volts to the oscillator, stabilised by a VR105/30.

Tune the main dial to the crystal frequency and switch ON, giving the unit about 30 minutes to settle down. Note whether the magic eye shadow is wide (i.e. 90°). If not, the oscillator is not tuned to the crystal; to adjust, slide back the small cover on top of the unit giving access to the oscillator adjusting screw in the coil box. Carefully adjust until the eye angle is 90°.

The units in use here have proved to be very stable and, as could be expected, have oceans of output. The output in fact is somewhat embarrassing and it is proposed to remove one of the 1625 tubes and re-adjust for single tube operation. This calls for a change in the grid bias resistance and an adjustment to the neutralising condenser which will be found on the right-hand side wall of the unit. This job however is not a difficult one. (Another alternative is to cut the h.t. supply to the tube and leave it in, which would not upset neutralising and only call for a change in bias.—Ed.)

CONVERTING TO TAKE 807s

If a unit has been purchased which has no valves, it may be more convenient to use 6 volt filament types. The 1625 sockets can be easily altered to take 807s as follows:—

Remove the "U" shaped springs from pins 1, 2, 4, 6 and 7 on each socket, and then bend contacts apart slightly.

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A small rat-tail file can now be inserted in the socket holes and the insulation filed. Holes 1 and 7 are filed half the diameter of an 807 socket pin in the direction of the centre of the socket. Hole 4 is elongated equal to its own diameter, also in the direction of the centre of the socket. Holes 2 and 6 are filed equal to their own diameter, in the direction of hole 4.

After checking to see the 807 fits correctly, replace the socket springs.

In the original 7 pin sockets, pins 2 and 5 were used as the points, having no connection to the valves. It is therefore necessary to remove the plate resistor from its tie point on pin 2 of the right-hand socket, and connect direct to its by-pass condenser. On the left-hand socket the relay leads connected to pin 2 (in article), are shifted to pin No. 7 and the strap between pin 7 and 2 removed.

The screen leads which were on pin 3 of each socket are re-wired on pins 2.

BAND SPREADING

The degree of spread on the Amateur bands can be increased by placing a fixed capacity in series with the oscillator and p.a. tank condensers. These condensers must have the same value to retain tracking. Values of 100 pF. give a good spread and should be good quality mica condensers, the oscillator condenser being a zero coefficient ceramic preferably. The 7-7.2 Mc. band occupies about 90 degrees of dial space on the 5.3 to 7 Mc. model with the series capacity specified.

Series Phased Aerial Arrays

(Continued from Page 5)

main boom according to the circumstances and the room available and provide cross numbers of light, strong timber and attach grid which is supported by a number of polystyrene split blocks. This holds the whole grid of tubing rigid on to the wooden frame and the method of rotation is one of normal practice and must be left to the intending builder's imagination, his circumstances and his pocket book.

Reference is made to the method of folding the quarter wave feeder and terminating stubs back under the beam to save room. This in no way affects the behaviour of the beam. It should be remembered that the direction of propagation is back over the feeding end of the beam when it is terminated with a 300 ohm resistor.

A TWIN RIBBON SERIES PHASED BEAM

Reference to the drawing of the Series Phased Beam will suggest that there are more ways of filling a pig other than choking him with butter. There is available these days, twin ribbon feeder cable in various impedances. It is suggested that the feed from the transmitter tank could well be in 300 ohm ribbon and the elements of 80 ohm—the feed between each section to be also of 300 ohms.

The whole could be laid out on insulators on a wooden frame and would be light and effective. The feeding stub

need not be used as the 300 ohm ribbon will eliminate the necessity for its use. A quarter wave of the same 300 ohm cable can then be used as the terminating stub and this may be very conveniently folded back under the beam. If a bi-directional beam is desired, this too can be dispensed with altogether.

FEEDING AND BALANCE OF BEAMS

One of the most important subjects which Amateur transmitters should give attention to is the matter of feeding. The old idea of stuffing a few turns into the tank should be avoided. This practice almost invariably results in capacity coupling and if the case is bad may result in the beam and its feeders acting as a Marconi radiator against ground or the electric wiring system.

An aerial tuner should be used in all cases. This will ensure good results, by elimination of standing waves, b.c.i., etc., and above all reduce the losses in the system, thus ensuring maximum energy in the radiator.

The reader is strongly urged to read "Parallel Standing Waves," by W3BLZ, in "QST" of Jan. 1948, page 45. Application of the suggestions contained in this useful article will help towards the objective.

ALTERATION TO V.H.F. BAND

As a result of negotiations between Federal Executive and the P.M.G.'s Department the band 144 to 148 Mc. becomes available for exclusive Amateur use as from the 1st May, 1948. This band replaces the 166 to 170 Mc. band.

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"HOW TO LOSE FRIENDS"

By E. A. Charles, VK5YQ

Before proceeding I would like to apologise to all those to whom I caused unnecessary QRM in 1947. I refer in particular to those nightly 14 Mc. phone cross-town long-winded inane rags. It shall not occur again.

Good operators are the result of successful experience. It takes some a lot longer than others to catch on. Instead of complaining, let's try and help the other guy learn a little more rapidly.

THE SECRET OF SUCCESSFUL DX IS THE ABILITY TO VISUALIZE THE SITUATION AT THE OTHER END AT THE TIME!

To illustrate I will quote two examples. The first, Friday evening, 2nd January:—VK-ADX v.f.o.s. onto W3JCR's frequency and answers his CQ, with about 50 calls before giving his own. By some miracle he is partly heard; by a greater miracle, answered. W3JCR explains, says his name is Bill and goes over. Back comes ADX (who obviously didn't get this), "You're Readability 5 and Strength 8 to 9 old man!" Neither are heard again.

Here is what ADX obviously does not know. W's phone band is 14200 to 14300 Kc.; there are quite a lot of American stations licenced. He was lost in QRM before he started. Any station that calls very long without giving his own call is automatically passed on.

When the Ws aren't coming through it is nice to move into their phone band to be clear of QRM. However, how many of you give it real thought—if you listened with a little more interest you would most likely hear some VK4 or VK6s working them. So you don't QSY there to give them QRM unnecessarily.

If you don't know how the bands are used, ask someone—that's how we all learned.

Second example, Saturday afternoon, 3rd January:—VK2OQ contacts TI2OA from about 10 Kc. above his frequency. VK-JP was there, over-modulating and v.f.o.ing onto each South American as he appeared. I did hear TI2MA go back to JP as ---JC, but at that time, TI2OA had called CQ at S9 plus. Before VK2OQ has finished, JP is on his frequency frantically calling again. They have another over—at least TI2OA does—then JP calls again despite the fact that Otto had said he was looking for VK3SB. Noting the absence of the VK3, I picked a frequency a little clear—lower than the above splatter, and contacted TI2OA. But did I hear his final? No! JP was on him again calling! I pulled the switches in disgust! But I'll bet he didn't get that QSO.

The correct thing to do—picture yourself at the other end—would you answer a station that rudely interrupts your conversation? You'll tune away to someone in the clear. Simple, isn't it?

Unfortunately some people let their enthusiasm over-ride their better judgment. What if you do make the DX

Century Club in record time, you'll lose your good name in the process. DX will always be with us.

Most people call far too long. Admittedly some stations have HRO receivers with 400 degrees of bandspread, but a chappie usually first tunes the end of the band on which he himself is operating. Put yourself at the other end. OK—if you are on the opposite end of the band, wait until you think he has reached there, and call briefly. You have saved wasted calling should he find someone on his end of the band. Personally I always specify at the end of a CQ just from which end of the band I shall commence to tune. And when I answer (invariably in the case of VK contacts), I call no more than six times, sign and listen. If he doesn't come back, I wait until I think he has tuned to the other end of the band, then call briefly again.

The QSO itself. Unless you have something unusual in the way of antenna, receiver, or circuit hook-up, the other chap doesn't want to know—he's far more interested in the way his own rig is performing. However he does like to see how the antenna and power results compare. If he is new, you may be able to help him overcome a spot of bother which concerns him much more than the DX you are itching to boast about. And please don't talk for the sake of talking to the "great unseen audience." There are lots of listeners who aren't "wireless cranks." Remember, your operating style is a fair indication of your character!

Then there's the matter of giving information. It pays to be sure of what you say—we can all make mistakes at times. The other chap will undoubtedly look it up and/or try it out—and undoubtedly change his opinion of you. Why not quote a reference—"I saw it in so and so." After all there are few of us with laboratory facilities, and far less who know something that isn't to be found in a book somewhere.

This "Hi—Hi" business on phone. To those who must punctuate each sentence with this method, why not break the monotony by using a few "Fee-Fee," "Ho-Ho" and "Haw-Haw" if you can't laugh naturally. Granted a normal guffaw could be lost in QRM when working an XU or KQ.

"NEVERMORE QUOTH THE RAVEN!"

By "Damocles"

Great game this Ham racket—been in it a long time haven't you—all of ten years or so—know all there is to know—and don't hesitate to air the vast fund of knowledge. Big authority and all that. You are Mr. Ultra-Modern Era phone-man, yes, you can punch a key too, but you only do that on occasions: knowing that if what you sent in "the clear" reached authority, there might be storm clouds on the horizon.

No, you aren't in the radio industry, but you gave that other VK an ear-bashing about what he should do. He couldn't be expected to know over-much

—he is only a lab. technician with one of the largest radio engineering concerns. You couldn't be expected to know either that he was modest enough to pass your gab, in one oreille and out the other, but you know more than him; you just read it up in the Hand-book in the long-suffering boss' time.

Yes, a plausible mike technique sure impresses that new Ham, but depend upon it that he will find you out, perhaps sooner than later. Your station is a beacon light in the wilderness of dead-heads on the band; your "audience" awaits your advent with bated breath. And then, l'entra magnifique! Wise-cracking, "Smart Alec Comebacks" and sepulchral "Heh, Heh, Heh's" of the kind that infect your imitators so profoundly. This is the stock-in-trade, and this is the Era of Progress; of speech and still more speech—ad lib—ad infinitum—and to the devil with the morse key.

Fancy any poor mutt wanting to really use c.w. and to waste time thusly. Besides, how could the girl friends be impressed if they couldn't hear those dulcet honeyed tones. And when they visit your shack, which is so often, what more fitting than they be duly impressed with "Raaaaagers" and "Brrrrreaks"—with a few Wilco's thrown in for good measure. Thus is your superb wizardry demonstrated.

Atmosphere is provided by gurgling liquid sounds, clinking glasses and thinly veiled innuendoes, so full of zest. The audience there and "on the air" are rocked to the foundations. It is fitting to inform the world at large that you suffer from "hangovers" as a result of "sessions." It is the very pinnacle of good taste that exudes from your microphone, or so you dumbly imagine.

It is impressive to yap in staccato phrases, inferential tones and ill-concealed riddles—transparent in fact to anybody with the smallest IQ. There are lots of fellow-hams that you don't like on the air—but you don't tell them so directly—they mightn't be so complacent about it. The technique is indirect reference with an under-current of spreading ill-will far and wide. But the saying that "he who throws mud must expect some to stick to himself" is just as true in this Amateur Radio game as in other walks of life. And sometimes prodded worms turn out to be angry lions.

Far better is it to accept this erstwhile pleasant hobby of Amateur Radio as a hobby—for that after all, is just what it is—nothing more or less. When individuals make it a medium for antagonism between fellows, then it becomes something else—and even the proverbial Raven would be averse to it.

And of which is to draw attention to the unpleasant fact that there are instances of phone operation on our bands that would be better eliminated—for the good of the hobby. These are casual observations, they mention no specific individual, the only offence likely to be taken is by those with guilty conscience. There are phone merchants of the ilk portrayed among us but they are in the minority. But a cancer starts with a minor ailment!

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SPECIAL ATTENTION GIVEN TO COUNTRY MAIL ORDERS.

KINGSLEY NARROW BAND F.M. ADAPTOR

This unit consists essentially of a limiter and a discriminator, the purpose of which is to permit reception of frequency modulated transmissions.

Any Communications type receiver with a 455 Kc. i.f. channel as the final intermediate frequency may be adapted for f.m. in this way. "The New Look" type of final low frequency i.f. channel (to steal a term from "QST") would of course be the wrong i.f. frequency, but how could one receive f.m. phone with an i.f. pass band with this form anything?

The adaptor, which is illustrated in the Kingsley advertisement in this Magazine, uses a 6J5 as a cathode follower, connected directly to the secondary of the final i.f. transformer and, due to the small loading effect of the well-known cathode follower system, the alignment of the i.f. transformer is readily restored by a very minor adjustment to the secondary trimmer or tuning core. In order to take the best advantage of the cathode follower, the adaptor is designed to plug directly into a six pin socket which is to be mounted on the rear of the receiver chassis, as close to the output of the i.f. channel as possible and as the other connections to the receiver circuit are heater, h.t. supply and audio frequency input, these lead lengths are relatively unimportant.

From the cathode follower 6J5 via resistance capacity coupling we go to the 6S7J limiter. This stage is the conventional grid leak, low plate and screen voltage connection, and in the limiter plate circuit is the special balanced discriminator transformer which in turn looks into a 6H6, using the Foster and Seeley discriminator circuit. This discriminator transformer has a litz wire wound primary fitted with an iron dust pot and tuned with an iron dust core to 455 Kc. The secondary is a balanced winding in two sections and is padded with a fixed silvered mica condenser and tuned with a 3 to 30 p.F. trimmer.

The discriminator output is taken via a coupling and filter system to the audio frequency input to the receiver and this is an efficient and convenient place for the switching to be made from a.m. to f.m.

In fitting this adaptor unit, the input to the a.f. gain control is opened and both the output from the original a.m. detector and the input to the a.f. channel are run in shielded wire via the socket at the rear of the chassis into the adaptor to pick up the output from the f.m. detector, then along to a switch, to be fitted in a convenient place on the front panel of the receiver. Thus once the unit is installed and the two trimmers peaked to the i.f. frequency, the simple operation of a single pole double throw toggle switch, changes the receiver immediately from a.m. to f.m.

BRITISH RADIO COMPONENTS MANUFACTURERS' EXHIBITION

Federal Executive received an invitation to attend this Exhibition, and as readers will realise it was impossible for a member of F.E. to accept this invitation. Federal Executive requested Mr. Ken McTaggart (VK3NW/G3CUA), who is at present in England, to represent the Wireless Institute of Australia.

Ken duly attended the Exhibition and the following is an extract from his letter, and we have no doubt that readers will find it interesting.

"This is just to let you know that in due course I attended the Radio Components - Manufacturers' Exhibition at the Grosvenor House Hotel and found it of very great interest. Under separate cover and by ordinary mail, I am sending you one of the small "guides" to the exhibits which will give you some idea of the number of exhibitors and the variety of components on show, and also a couple of leaflets which describe some new departures in the design of speakers which I thought of special interest.

"It would be impossible for me to describe even a fraction of the good things I saw. This country appears to make every imaginable component nowadays, and the quality seems of a high order. Unfortunately in the shops the prices are rather too high and many things are in short supply, but that does not alter the fact that the manufacturers here are wide awake and out to produce the goods.

"I might mention in particular the very fine ceramic mouldings that are made for switches, valve sockets, condenser insulating standoffs, and so on; the variety of plastic insulated cables including the wide range of 'twin lead' of various impedances, and co-axial cable from approximately $1\frac{1}{2}$ " diam. up to over an inch; a wonderful assortment of relays of all descriptions; speakers from 2" to 20" and larger for public address work—including the new speakers described in the pamphlet I have sent which are from 2 $\frac{1}{2}$ " to 8" diam. and only 4" to 4" deep, very useful for portables, mantle models, etc., and anywhere where space is at a premium.

"This country is also producing splendid meters of all kinds, also a wide range of microphones, while fixed condensers of various sizes and tolerances (down to $\pm 0.5\%$) and finished in 'lacquer,' 'manufacturers' semi-tropical,' and 'fully tropicalised' finishes make one's mouth water.

"I could go on like this for many pages but it would not tell you a great deal. To summarise, I would say that things are booming here and England is producing radio gear equal to any in the world and better than most. Thank you once again for sending me the invitation.

"Yes, I see Elgar Trebarne periodically and have passed on your 73. He maintains regular contact with his father 2BM and seldom misses a morning. I

have not been so fortunate, but have contacted a number of the boys including 3YP, 3BZ, 3CZ, 3XU. Also some VK2s, 4s, 5s, 7s, and one VK6. I have been on 58.5 Mc. quite a lot and find conditions there very good with much more temperature inversion than we get in VK3, enabling work from 50 to 200 miles to be done quite regularly. 50 Mc. has now faded out again and unfortunately I was not able to get on during the excitement. However I may be able to do something in the summer before I leave here.

"I get the Mag regularly—although belated—and am very glad to see that the 50 Mc. fellows are keeping up the good work with field days, Spor. E and so on. One reason for wanting to return is to take part in those most enjoyable outings to the hills!"

FRENCH EXPEDITION TO THE ANTARCTIC

It will be recalled that Monsieur Yves Valette, who is mentioned, was a guest at a recent general meeting of the Victorian Division and spoke of the proposed French expedition to the Antarctic during a short address to members.

Monsieur Valette was accompanied by Monsieur G. B. Perronne, Commercial Secretary to the French Consulate in Melbourne, who approached the Victorian Division of the W.I.A. in making the initial enquiries concerning the possibility of the French expedition maintaining constant radio contact with Australia.

The following article appeared in the Melbourne "Age" on Saturday, 3rd April.

"France will send a well-equipped scientific expedition to the Antarctic at the end of this year. It will be the first French party to visit the Antarctic since 1909.

"M. Yves Valette, a French engineer, received a letter from the French Government confirming the plan to send an expedition southward when he stepped ashore at Williamstown on Friday, 2nd April, from H.M.A.S. LST3501, which returned from the Antarctic. He will be one of the leaders of the expedition.

"M. Valette has had wide experience in the north polar regions, and 'limbered up' with a 300-mile trek on Spitzbergen before he flew out to Australia, to accompany the Australian party to the south. He is a champion skier.

"He went to the Antarctic in H.M.A.S. LST3501 to study conditions and make an advance survey for the French expedition.

"M. Valette said the expedition would go southward in minesweepers used during the war by the Free French. He said the party would include meteorologists, geologists—who will look into the rumor that uranium ore is available in the Antarctic—and cosmic ray experts.

"All the details are being worked out in Paris," he added. "It will be a most important expedition. We must establish our claim down there." The French party will sail from Australia."

FIFTY AND UP

Compiled by VK3QO, to whom all contributions can be sent

DX ACTIVITIES

Max SBD took a little holiday on the 20th and 21st March; while he was away, his contacts turned on his 50 Mc receiver and heard what they took to be ZL4HT, but did not make a note of it! About three weeks ago SBD had a contact with 4ZU, s/n faded out on the third over. Next was on 7/4/48, SKO heard 2ADT and 2LY; on same evening 5QR worked 2YR, 2LY and 2WJ. S9 both were heard.

On Saturday 17/4/48, between 2130 and 2220 SRR heard 2ADT, 2OC and 2EU. Dicky called and worked them, but not too good as signs were out, peaking to S8. However 3GM and 3EL at 2130 and 2200 each of them had fair reports. 4XG, 4ZU and 4XU were also heard working themselves. 5QR and 5LA also contacted these VK5s. 3XA heard 2ADT S9, but no contact.

It is understood that on Sunday, 18/4/48, the 2L boys worked from one end of New Zealand to the other, being 1000 miles apart. Fine business following. The 2Ls should have had to watch the band, if you want your share of DX.

W2SVA/KLT in the Aleutian Islands will be on 52 Mc. with 1 kilowatt input with special antenna beamed on Australia. He will be listening on that band and will be active on 14 Mc. W2SVA/KLT would appreciate any reports should his signals on 52 Mc be heard.

VKS3-VK7 CONTACTS

Some very interesting work has been done by VK5CH in working from Mt. Fatigue across Bass Strait to 7AB in Burraule and TXL in Devonport, a distance of about 190 miles.

3CI first made contact on 27/3/48 and on next weekend, 2nd and 4th March, he camped out up the Maitland River. On the Saturday he worked 7AB with S9 signs and no QSB. TXL not on air at time.

However he worked both 7AB and TXL about every hour and was consistent in signals, so it appears that ground wave was being used. (SRR may have been using "wave" wave.) On the Sunday he repeated the performance, but 3DI portable at Leongatha and 3HK portable at south end of the Dandenong Ranges, and 3VL at Red Hill did not hear the VK7s. 3BQ at home, heard a carrier when he had every reason to believe it was 7AB and if c.w. had been used he could not identify it positively. Further tests will be made to see if contact can be made from lower levels.

VK2 V.H.F. MEETING

The VK2 Group, which has been meeting at Science House on the second Friday of each month to celebrate its first birthday this month (April). The members, whose numbers are gradually increasing, are most enthusiastic. The March meeting took the form of an informal "free-for-all" discussion on many things—almost the whole spectrum of short wave, plus a few by Moser, McGowan (3M2Q) and McDonald (3APC). Mr. McGowan spoke on the subject of r.f. amplifiers and frequency converters for 50 Mc. and outlined some experiments he has made on the subject. Mr. McDonald detailed a novel converter for 40 Mc. which uses a 50 Mc. "A.R.C." to precede an ECH35 mixer-oscillator, and the grid tuning for each stage is by means of a condenser of sufficient capacity range to cover both bands without changing coils. The oscillator operates in the range of 39-43 Mc., thus giving an Mc. 1.2 to 1.4 ratio. The result is a converter giving a single dial control, full scale bandspread, and without coil switching. Both these gentlemen have agreed to write articles on their respective subjects for publication in "Amateur Radio," and it is felt that these articles will be very interesting.

Mr. John D. Smith, of the C.S.I.R. Radiophysics Laboratory, was to have addressed the April V.H.F. meeting on the subject of V.H.F. Receiver Design, but unfortunately developed appendicitis at the last minute. His place was duly filled by Mr. Bird, who spoke on the subject of antenna arrays, giving 360 deg. long period arrays with horizontal polarisation. This lecture was of great interest (mainly to those having access to large quantities of brass tubing!) and Mr. Bird has kindly consented to write an article on the subject for "A.R.C."

At this meeting, a discussion was opened regarding vertical versus horizontal polarisation for opening the 144 Mc. band. After considerable discussion, it was decided to recommend that HORIZONTAL polarisation be regarded as "standard." At the same time, it is realised that vertical

polarisation has its merits, especially for local contacts, and those having facilities for erecting both systems are urged to do so.

In order to stimulate use of the V.H.F. bands, it has been decided to organise a contest. A committee has been appointed to consider the form the contest should take and to formulate rules, etc. Details will be published at a later date.

The Radio Research Board, who are concerned with ionospheric soundings and predictions, have expressed an interest in long distance and unusual propagation conditions on v.h.f.s. It is stressed that normal contacts are of little value and the required information is as follows:

Date, Frequency, Direction of Signal arrival, Distance between Transmitter and Signal Strength, Time coming in, and Time fading out.

Mr. Curthwells (VK3AXB) has agreed to act as "clearing house" for reports as above, and it is requested that reports be addressed as follows:—

Mr. Curthwells, c/o. Court House, Newtown, N.S.W.

Once again members using the 50-54 Mc. band and those planning to use it, are urged to utilise the high frequency portion of the band, and to sign off, at least on c.w. Commercial interests have their eyes on the 50-54 Mc. band, and it is suggested in this case if the contact from say 55 to 54 Mc. is not used by Amateurs. The recommendation to use c.w. is prompted by the fact that weak carriers are often heard, but cannot be identified on phone, whereas if c.w. were used, it might open up DX possibilities.

JOTTINGS FROM AROUND THE STATES

YR3LX at Colac (90 miles) broke through several times on calls night after the last month. He worked through a set of Melba coils, but at 50/60 using a long wire (one leg of a V beam), tried a two element but signals were no better.

3HZ (Warrigull) and 3DI (Longgatha) get good signals from one another. 3ZL (Ballarat) has been trying out different converters, but has not sold out yet. 3DI has a repeater tied with 3HK at Murchison. 3HK is portable at 135 degrees from correct position, due to some reflection or other. SRR has been trying out a six element beam at Macleay. 3BQ gave him S9 plus 24 dB of front end noise, giving a 10 dB front to back of 48 dB (eight S points). Dicky still not satisfied and thinks he can do better!! Job was close spaced, 12½ feet high.

3NP is latest addition to 50 Mc. band, using 100 watts to p.p. 300 in final, with 15 tube mod. 3ABG is at Dandenong in an impromptu test, flat top Melba coils with maximum grid bias, trying to get by to 3AK1 at Mt. Sabine on the coast. The actual Field Day opened under dull and cloudy conditions and by noon onwards heavy rain ruined any good work. The most reliable signal came from Mt. Macedon, where 3ACB was putting out a steady 50 watts. All the afternoon 3ABA at Prahran, 3AL at Frankston, 3LJ at Dandenong, 3AK1 at SRR, 3HK and to the surprise of many 3ZL and 3LH. 3ACM topped off the day with a f.t. two way record-breaking phone contact for a distance of 92 miles to 3MB at Poowong in South Gippsland. Congrats to both 3ACM and 3MB for taking the record. 3LH and 3AK1 also had contacts with 2BZ in Newcastle to 3WV at Maroubra, a distance of 78 miles and before that a jump of 72 miles by 3LH at Mt. Macedon to 3YS located at Arthur's Seat on Port Phillip Bay.

Interest is still maintained in 166 Mc. by the Adelaide group, where the latest recruits to the band are 3GB and 3GK. 3GB uses CVA mod. one plus a mixture of long wires, dipole and ground plane antennae. 3JD's super receiver provides too many headaches, better wait for 144 Mc. Johnny 2NF informs that there are scores of VK5 stations sitting on the fence waiting to head-in on 1st May. 3LH, 3NP, 3ND and 3WV will be down South again, probably with the QTH at Liverpoole.

In view of the shift to the 144 Mc. spectrum, it is considered by many that something definite concerning the type of aerial polarisation for this band should be decided on, the object being to avoid cross polarisation, or to put it plainly, for everybody to start operations on the new band with the same kind of polarisation as is now being conducted. The "oldies" up to date, in VK5, is quite unanimous as to horizontal polarisation and, judging by the change-over from the vertical form in N.S.W., the VK2 boys also agree. It seems to be the logical step to use horizontal as it is the most efficient and easiest to align with the ionosphere. Still, it is a matter of location and experimentation, and that is what we are here for, so we hope for co-operation from the Interstate v.h.f. groups in deciding what standard is to be used.

four element on 50 Mc. and a sixteen element on 144 Mc. 4RT buys converting his 522 transmitter to 50 Mc. He has fitted a pre-amp for a crystal microphone and is fitting a feedline to the 4RT. 4RB somewhat embarrased for time, but getting a responder unit going as a receiver. Getting elements together for a beam, 4ZU just finished a dual converter unit for 50 and 144 Mc., the thing feeds into a 341 and works out quite well. 502s, 503s and 504s will be available, excepting screens from condenser couplings, etc., should remember that a weak heat applied to the screen area makes the job much easier. Even the tang of a file ground to size is sufficient to remove the screws under this treatment, according to 4RT who has tried it.

From VK5QH—Apologies to 3QD from VK5 here for the writing, but activity is at low level here in VK5 again.

From VK6LG—Very little to report this month. Usual nightly activity and increasing interest among country stations. 6FC at Mindung (118 miles) still putting in good signals at night, but believe his rig is to be transferred to 6GJ, also at Mindung. 6GJ will soon have a 1000 watt beam, 6FC at Cadelbo, a distance of 60 miles. Strength 5 and 7 were the reports. Believe several lads waiting to go on 144 Mc. with SCR523. Watch it chaps, and don't beat the gun. Remember May 1, not April 30.

144 Mc. DIGEST

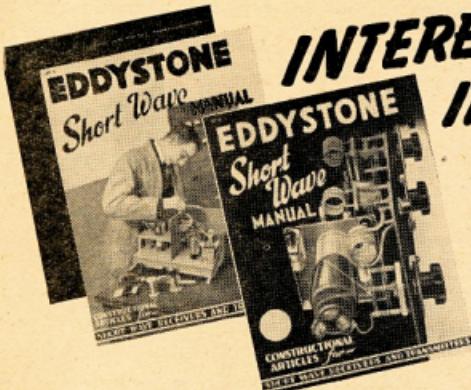
By the time these notes (by Bill Hartley) are published the old 166 Mc. band will be finished with, but not forgotten as the gang will have pleasant memories of the good times that they had on the old spot and will leave it with a touch of regret. They will, I am sure, do well with a touch spot that is still the 166 Mc. dipole, and have a record for the W.A.S. certificate (worked all subbands).

Operations never slackened on 166 Mc. even right up to the "kill," actually there was always some new station putting in an appearance, 3ADF being the latest, with 16 watts input to a 3S2, four stage v.h.f. rig, via 3M1. 2B 6N7 modulator on a 3M1 power, 3HK, the receiver is one using a two stage grounded grid pre-amp using RL375s, which lift anything from S1 to S9.

In preparation for the last 166 Mc. Field day in VK3 the following carried out tests: 3ACM, 3ABA, 3VS, 3LS, 3LS, 3MB, 3MN, 3XM, 3EM and 3VJ. 3LS at Mt. Dandenong in an impromptu test, flat top Melba coils with maximum grid bias, trying to get by to 3AK1 at Mt. Sabine on the coast. The actual Field Day opened under dull and cloudy conditions and by noon onwards heavy rain ruined any good work. The most reliable signal came from Mt. Macedon, where 3ACB was putting out a steady 50 watts. All the afternoon 3ABA at Prahran, 3AL at Frankston, 3LJ at Dandenong, 3AK1 at SRR, 3HK and to the surprise of many 3ZL and 3LH. 3ACM topped off the day with a f.t. two way record-breaking phone contact for a distance of 92 miles to 3MB at Poowong in South Gippsland. Congrats to both 3ACM and 3MB for taking the record. 3LH and 3AK1 also had contacts with 2BZ in Newcastle to 3WV at Maroubra, a distance of 78 miles and before that a jump of 72 miles by 3LH at Mt. Macedon to 3YS located at Arthur's Seat on Port Phillip Bay.

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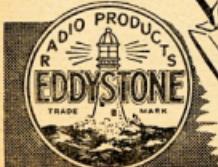
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NEW SOUTH WALES

Secretary.—Wal Ny (VK2XU), Box 1734, G.P.O., Sydney.

Meeting Night.—Fourth Friday of each month at Science House, Corner Gloucester and Essex Sts., Sydney.

Divisional Sub-Editor.—R. Deal, 209 Oberon Street, Coogee.

Zone Correspondents.—North Coast and Tablelands: P. A. Evans, VK3AV; North West: G. H. W. Moore, VK3QH; Newcastle: E. J. Baker, VK2PP; 13 Skelton St, Hamilton, Newcastle; Coalfields and Lakes: H. Hawkins, VK2LW, 27 Comfort Ave., Cessnock; Westerns: G. J. Russell, VK2QA, 116 Roger St., Nymang; South Coast and Tablelands: R. H. Reymar, VK2DO, 42 Pettif St., Yass; Southern: E. N. Arnold, VK2VU, 673 Forrest Hill Ave., Albion.

VICTORIA

Secretary.—B. D. Evans, VK3VQ, Box 2611W, G.P.O., Melbourne, Telephone: FI 6997.

Meeting Night.—First Wednesday of each month at the Radio School, Melbourne Technical College.

Zone Correspondents.—North Western: B. R. Mann, VK3BM, Quambatook; Westerns: C. C. Waring, VK3YW, 128 St Kilda Rd, St Kilda; South Western: B. R. Mann, 118a Argyle Street, North Ballarat; North Eastern: D. Lacey, VK3DW, 18 Harold St, Shepparton; Far North-Western Zone: Harry Dobbin, VK3MF, 42 Walnut Ave., Mildura; Eastern Zone: J. D. Chilver, VK3DI, 20 Smith St., Leongatha.

FEDERAL

THE CONVENTION

The Eighteenth Annual Federal Convention of the Wireless Institute of Australia was convened at the hall of the Victorian Division at 2.15 p.m. on Friday, 20th March, 1948. Being the third Convention held since the cessation of hostilities in 1945, it was again represented by delegates from all Divisions.

The delegates present were: New South Wales—Mr. J. M. Moyle, VK3UJ; Victoria—Mr. H. N. Stevens, VK3QH; Queensland—Mr. F. M. Nolan, VK4FN; South Australia—Mr. H. L. Austin, VK5AW; and an observer—Mr. A. F. Wredford, VK5WD; Western Australia—Mr. A. A. Evans, VK6GM; and an observer—Mr. J. Brown, VK7BJ. Also in attendance were the Federal Vice-President, Mr. A. G. Glover, VR3AG; Federal Secretary, Mr. W. T. S. Mitchell, VK3UM; Federal Treasurer, Mr. P. Evans, VK3QZ; Federal Publicity Officer, Mr. W. G. Manning, VK3VU.

Owing to illness the Federal President, Mr. W. R. Gronow, VK3WG, was unable to attend the Convention. We are pleased to say that he is now well on the way to recovery and are long will be with us again in the near future.

Mr. Evans on behalf of the Federal Executive, welcomed the visitors and was ably supported by Mr. H. N. Stevens, Victoria. Following on the reply made on behalf of the delegates by Mr. J. M. Moyle, nominations were called for the position of Chairmen and Mr. A. G. Glover was appointed.

The first business of the Convention was to reach agreement on the title of the Federal Constitution and it was resolved that the 1947 Federal Constitution of the Wireless Institute of Australia be changed to "The Federal Institute of Australia 1948 Constitution as revised in 1947."

Following discussion on the Federal Constitution it was found that a slight re-drafting of three sections were to be made by Federal Executive and these sections of the Constitution to be submitted to all Divisions for ratification.

A copy of the Federal Constitution will be made available for the perusal of any financial member upon application to his Divisional Secretary.

With regard to the drafting of a Uniform Divisional Constitution, the drafting an outline of the progress to date.

The Convention adopted the principle now in use in the New South Wales Division for use in all Divisions in relation to Radio Clubs.

As the Convention was not in a position for the appointment of full-time Federal Secretariat this matter was left in abeyance.

A report was made by Federal Executive giving details of the plan at present under discussion for the formation of an R.A.A.F. Reserve and in addition will collect and collate all available data regarding

WI BROADCASTS

All Amateurs are urged to keep these frequencies clear during, and for a period of 15 minutes after, the official Broadcasts.

VK2WI—Sundays, 1100 hours EST, 7196 Kc. and 2000 hours EST 50.4 Mc. No frequency checks are available from VK2WI.

VK3WI—Sundays, 1130 hours EST 7196 Kc. Spot frequencies every fourth Tuesday, between 7000 and 7200 Kc. every 10 Kc. Individual frequency checks of Amateur stations can be made when VK3WI is on the air.

VK4WI—Sundays, 0900 hours EST simultaneously on 7109 Kc., 14342 Kc. and 52.004 Mc. Frequency checks are given for two nights weekly and these are announced during the Sunday broadcasts.

VK5WI—Sundays, 1000 hours SAST on 7168 Kc. Frequency checks are given by VK5DW on Friday evenings on the 7 and 14 Mc. bands.

From **VK6WI**—Sundays, 0930 hours WAST on 7168 Kc. No frequency checks available.

VK7WI—Second and Fourth Sundays at 1030 hours EST on 7174 Kc. No frequency checks are available.

QUEENSLAND

Secretary.—G. G. Augusteisen, Box 638, G.P.O., Brisbane.

Meeting Night.—Last Friday in each month at the State Service Building, Elizabeth St., City.

Divisional Sub-Editor: H. T. MacGregor, VK4ZU, "Moquet," Eildon Rd., Windsor.

SOUTH AUSTRALIA

Secretary.—E. A. Barber, VK5MD, Box 1234K, G.P.O., Adelaide.

Meeting Night.—Second Tuesday of each month at 17 Waymouth St., Adelaide.

Divisional Sub-Editor.—W. W. Parsons, VK5PS, 483 Espanola, Henley Beach.

WESTERN AUSTRALIA

Secretary.—W. E. Caxon, VK6AG, 7 Howard St., Perth.

Meeting Night.—Second Monday in each month at the Builders Exchange, St. George's Terrace, Perth.

Divisional Sub-Editor.—R. W. S. Hugo, VK6KW, 8 View St., Subiaco.

TASMANIA

Secretary.—J. Brown, VK7BJ, 12 Thirz St., New Town, Telephone: W 1528.

Meeting Night.—First Wednesday of each month at the Photographic Society's Rooms, 163 Liverpool St., Hobart.

Divisional Sub-Editor.—T. Connor, VK7CT, 385 Elizabeth St., Hobart.

Northern Correspondent.—C. P. Wright, VK7LZ, 3 Knight St., Launceston.

SILENT KEYS

PHIL BREWER, ex-VK5JJA

We regret to chronicle the passing, during April, of an old friend and colleague in Phil Brewer, ex-VK5JJA. Phil, who first came on the air about 1927, was a power in the DX realm up to 1935. His operating ability was second to none and his VK5 was the picture in many a Fisk Contest. Of a quiet and retiring disposition, but possessing an intense sense of humour, Phil endeared himself to those fortunate enough to break down his DX records. His was not the desire of the world and sickness took him from his uncomplaining lot since 1942. Phil did not renew his licence after the recent World War. To his sorrowing wife and young son goes the condolences and sympathy of all old timers in Amateur Radio who deeply mourn his passing.

existing emergency networks and evolve a workable emergency scheme for a National Amateur Network.

The Convention also felt that there was a need for the establishment of an A.O.C.P. correspondence centre and in this connection have instructed Federal Executive to start implementation of such a centre.

Considerable time was spent in discussion of the P.M.G. regulations, and it was decided to seek certain changes, notably the payment of license fees on an annual particular scale and the inclusion of the words "in receivers of modern design" between the words "programmes" and "the Amateurs" in Regulation 107.

That Federal Executive continue its endeavours with the P.M.G.'s Department with a view to ensuring that amateur station licences receive the same consideration as other licences in regard to reasonable interference and prevent the introduction of legislation to curb such interference.

All members are invited to log all types of transmissions from commercials and others not supposed to be in the amateur bands, and logs are to be forwarded, via their State Councillors, to Federal Executive.

The Convention confirmed the motion that W.I.A. traffic and broadcast channels be kept clear at the times and on the frequencies to be used from time to time, as published in "Amateur Radio" in order to assist in this direction it was considered that Federal Executive evolve a plan for all official W.I.A. stations to operate on a frequency of 7196 Kc. on Sundays and all members are requested to keep that channel clear from 9 a.m. to noon E.A.S.T. After official broadcasts have been made

the W.I.A. station will change to a frequency to be determined for intra-state working and thereby permit the next Divisional broadcast to commence. Your earnest co-operation is desired in this connection as the value of your chaps will realise by the amount of interference that appears with each official broadcast.

The illegal practice of breaking-in on a QSO for the purpose of injecting facetious remarks and the abuse of the v.f.o. was strongly condemned. In view of the recent Editorial in "Amateur Radio" on this subject, and further arrangements to be necessary, it is considered the boundary duty of anyone hearing instances of this nature to contact the offender concerned and with tact point out the wrongs of such operation, also that he is likely to receive a visit from the police. The above practice are to be discontinued with the same procedure adopted by stations notifying their readiness to join a network or group of stations who habitually work together; that is, station operator switches on earlier than normal and says, "This is [station] on the air for V.H.F. work" immediately cuts carrier until invited to transmit.

It was also considered that the P.M.G.'s Department be requested to allocate VK5 calls to Northern Territory stations and VK1 to Australian Capital Territory or other special stations.

Included in the agenda Items was the hasty annual that a "gentleman's agreement" be made to observe portions of each band for c.w. operation. Items were submitted and all delegates were asked to bring the matter before their Council for consideration.

It was felt that after listening to the various types of phonetic alphabets in use from phone stations the same should be established and in this end it was recommended that the one published in the P.M.G.'s Handbook should be encouraged. In order that an international standard phonetic alphabet be adopted the Federal Executive will be in touch with the International Amateur Radio Union to this end.

When Items concerning contests came up for discussion it was decided that the DX Contest be conducted in October in each year alternatively with the N.Z.A.R.T. and the Federal Executive. The 1948 contest will be conducted by N.Z.A.R.T. and in 1949 it is thought that as Their Majesties will be touring Australia and New Zealand the Contest, which will be conducted by Federal Executive, could be suitably known as the "Royal Commonwealth Contest." No doubt there will be certain legalities to be made in connection with the use of the word "Royal."

Contests, in the future, shall not exceed in duration 48 hours at any one period and the total operating hours shall be limited to 24 hours consecutive operating.

All contests of a Federal nature shall be conducted by Federal Executive under the direction of Federal Council. Federal Council have power to approve or otherwise of any Division conducting special contests.

As the concluding item on the agenda, Council decided that the next Federal Convention shall be held in Melbourne.

During the course of the agenda business the Chairman requested submission of items for consideration as general business; twenty-two items were submitted, fourteen of which were carried. The items of general business included: draft section of the Federal Constitution; delegations instructed by the Federal Council to take a certain way on agenda items shall hand in a note to the Federal Secretary on which is stated their method of voting in order that the section of the Federal Constitution on automatic ratification may be implemented; the Federal Executive from Divisional stations shall be made only on the authority of Federal Executive or the Federal Councillor of the Division. In this regard it was recommended from the Federal Council that any Division wishing prior information should contact the Executive for forward of the matter to the Federal Executive for immediate action. The Federal Council continues its enquiry in connection with the name "Royal" for the Wireless Institute of Australia. A special per capita levy of 5/- per member shall be made on Divisions to establish a starting fund for Federal Executive for the construction of a wireless equipment for the Commonwealth obligations. The F.M.C. Department be approached with a view to obtaining a mobile license as distinct from a portable license. That in future contests rules should provide that the logs of VK contestants be sent to appropriate State or Divisional Committees. Federal Executive be advised as to their being financial interests. That an approach be made to A.R.R.U. with a view to evolving an international numbering system for DX contests, pointing out the advantages of the VK system. That W.I.A. provide funds for a permanent trophy for the Commonwealth Day Contest and that as soon as possible F.E. forward suggestions to the Divisions as to the form that the trophy should take. In this regard Federal Executive would appreciate some constructive suggestions to enable them to arrive at a suitable decision. The distribution of awards, awards to be made by Divisional Federal Councillors at monthly Divisional meetings. That in the endorsement of membership certificates of the W.I.A. the appropriate membership grade shall be indicated, in considering the uniform Divisional Constitutions

DX C.C. LISTING

	PHONE	C.W.
VK3CN	108 (3)	
VK2EO	101 (7)	OPEN
VK2DI	116 (2)	
VK3HZ	100 (5)	
VK3MC	103 (6)	
VK3HG	100 (4)	

Three further applications are in hand awaiting checking from VK3KX, VK2ACX and VK3KZ. Certificates and the names of the members of the three new Constitutions delegations instructed by the Federal Council to take a certain way on agenda items shall hand in a note to the Federal Secretary on which is stated their method of voting in order that the section of the Federal Constitution on automatic ratification may be implemented.

The Federal Executive from Divisional stations shall be made only on the authority of Federal Executive or the Federal Councillor of the Division. In this regard it was recommended from the Federal Council that any Division wishing prior information should contact the Executive for forward of the matter to the Federal Executive for immediate action. The Federal Council continues its enquiry in connection with the name "Royal" for the Wireless Institute of Australia. A special per capita levy of 5/- per member shall be made on Divisions to establish a starting fund for Federal Executive for the construction of a wireless equipment for the Commonwealth obligations.

The Federal Executive to draw up a budget of anticipated expenditure for the Convention and send to the various Divisions, three months before the Convention meets, requesting the pro-rata amount indicated to be remitted.

All items herein are subject to the ratification of the Divisions.

The Convention was relieved by the kindness of the Victorian Division in entertaining the visiting delegates and Federal Executive at a dinner and suitable evening entertainment for which the thanks of all those present is hereby extended.

AMENDMENTS TO CALL SIGNS

New Issues

VK2AGW	A. E. Hay, 1544 Pacific Highway, Wahroonga, N.S.W.
2ALZ	V. J. Nugent, 47 Bayview St., Boxley.
2QZ	C. Bowler, 25 Castle St., Handwick (station on S.S. Iron Baron).
2UH	N. G. Hansen, University Hotel, Broadwater, Sydney, N.S.W.
2XW	L. G. Craske, 47 Russell St., Yarrawonga.
VK3AGU	H. Chapman, portable of VK3GU.
3DV	R. M. Davis, Birdwood Ave., Dandenong.
3GH	G. R. Howard, 52 Edendale, Brighton Beach, Victoria.
3QZ	E. R. Bowler, 4 Chambers St., Footscray.
3HJ	E. F. Roy, 17 Thame St., Northcote.
3RA	R. C. Greg, Davy Bay Rd., Mount Eliza.
3TH	G. C. Morrison, "Ferndale," Yinnar, Vic.
3UV	N. Serpell, 12 Royal Cres., Camberwell.

VK4GB	G. S. Barr, Emsworth St., Wynnum Con-
VK5CF	W. G. Wilson, 67 Brown St., West Groydon, S.A.
3PL	J. B. White, 30 Amherst Ave., North Norwood, S.A.
VK6EB	E. L. Bradshaw, 57 Government Rd., Morley Park, W.A.
6PA	R. F. Ager, 815 Wellington St., Perth.

Alterations:

VK2AP	(in lieu of VK3APR)—A. P. Reynolds, 11 March St., Richmond, N.S.W.
2HZ	R. Moore, 87 Gould St., Bondi Beach.
2HF	J. F. Furey, 88 Biscroft Rd., Biscroft.
2HG	J. F. Mackie, 35 Longueville Rd., Lane Cove, N.S.W.
2LE	H. S. Lee, Surville Point Rd., Doltone Bay, N.S.W.
2LO	S. J. Higgins, 27 Monash St., Wentworthville, N.S.W.
3MJ	A. J. T. Crisp, 20 Carrington St., Boxley.
2OU	(in lieu of VK4LF)—A. S. Littlejohn, 158 James St., Leichhardt, N.S.W.
2OK	(in lieu of VK6EV)—J. J. Mount, 48 Miller St., Gladeside, N.S.W.
2XJ	F. M. Beeson, 102 Griffith Ave., Banks Town, N.S.W.
VK3ACP	V. C. Forbes, 33 Phillips St., Abbotsford, Victoria.
3AL	(in lieu of 2LO)—Dr. K. M. Kelly, Infectious Disease Hospital, Fairfield, Victoria.
3ID	J. M. Meadow, 30 Stephen St., Hamilton.
3GH	G. Howard, 11 Grummond St., Ballarat.
3KG	K. L. Green, 52 Severn St., North Balwyn.
3QZ	J. G. Colley, 18 Cheshall Cres., Traralgon.
3XF	R. H. Madlen, Rupanyup, Victoria.
3ZF	R. H. Madlen, 62 Cetwynd St., West Melbourne, Victoria.
3ZF	G. C. Coventry, 311 Emmanuel St., Northcote, Victoria.
3ZY	F. Borges, 7 Charlwood Cres., St. Kilda, Victoria.
VK4CR	(in lieu of VK2ACD)—G. M. Carter, 56 Crescent Rd., Gyprie, Qld.
4DB	D. S. Brown, Mirrabooka Rd., Ashgrove.
4EA	E. R. Ashlin, Billings, South Coast, Qld.
4MW	M. J. Wratten, Clem St., Brassall, Ipswich, Qld.
4SG	R. Grantham, 54 Herries St., Toowomba, Qld.
4XY	L. I. McGarry, c/o Mrs. Crawford, Swan Hill, Taringa, Qld.
4YS	(in lieu of VK2YS)—S. P. Sorenson, c/o Station 4CA, Calma, Qld.
4ZZ	J. L. Kane, Dalgety St., Toowoomba, Qld.

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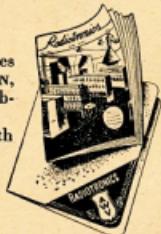
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 VK7NPA—N. J. Lipson, 1777 Invermay Rd., Launceston, Tas.
 VK9GW—G. A. Warner, Paga Hill, Port Moresby, T.P.N.G.
 Cancellations—
 VK3TM—A. H. Buck (deceased).
 VK3LQ—H. E. Loeser.

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VK2BQF—F. Easton	R.A.A.F.
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VK2JY—D. J. Morris	R.A.M.F.
VK2JY—W. Abbott	R.A.M.F.
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VK3OR—M. J. Templeton	R.A.M.F.
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VK6HQ—A. H. G. Rippen	R.A.N.
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VK6KS—K. Anderson	R.A.M.F.

The above names and details have been received by Federal Executive. Anyone knowing of any name not included on the above list or errors therein should communicate with F.E. at the earliest.

FEDERAL QSL BUREAU

RAY JONES (VK5RJ), MANAGER

Jim Austin (VK6SA) is expecting to visit Melbourne for a couple of days during the middle of May. Fred Williams, VK6FJ, will be in Melbourne for some time in Adelaide.

A nice card is that of RAEM/MM located aboard S.S. "George Sedov" presently located in Franz Joseph land. Among the "modest" claims of the S.S. Union Endeavour Expedition 1934-35, and "RAEM was the call of S.S. "Chekhov" which was smashed by ice in the polar sea in 1924. I was there as Chief Operator and since then RAEM is my personal amateur call."

A happy New Year greeting belatedly received from that of Val of CB7VR. Val is one of those rare ones who QSLs 100 per cent.

The following is repeated for the benefit of QSL Managers and others who seldom read this column. "D. A. Leslie, ex-VX2UH, is no longer QSL Manager for Fiji and is now back in New Zealand." The QSL address is Fiji in VY83, P.O. Box H. Mayne, Victoria Parade, Fiji. The continued use of Mr. Leslie's old address is proving embarrassing and costly to Mr. Leslie, and is delaying cards unnecessarily.

Ex-VX2GM now signs GS8UB, and VR6AAZ is now residing in the north island of New Zealand with ZL2ZP until the end of March.

An echo of a par some months ago regarding non-receipt of QSLs by Jimmy Dooley, then VX2UVR, comes from with Colin (VK6LQ) who, incidentally has just joined W.A.C. Tait. I am sure many must have received them and concluded, "I know a lot of Hams are too dumb, lazy or lossy to collect QSLs from Bureau for long periods, and then, when answering them, mark their cards 'P.S. QSL to come when own QSL received.' You have hit the nail on the head, Colin."

A fire broke out on the S.S. "Wairuna" whilst berthed at Vancouver. Whilst no details have yet been received, it is understood that only the prompt action of one of the members of the crew averted a major disaster. It is hoped that G6UB/P and his 50 Mc. and other gear escaped damage.

Was a pleasure to hear again from Leon Paul (VK4LXO, ex-VK3LPL) whose ability to handle a bug has not suffered during his absence from the aircraft. He has notes, gets scared up, pops Eric Trebilcot, HERB10, and is Werried. That's about an interesting budget of news. Eric, who is still confined to the ranks of listeners has the receiving end of the DX game well taped, having logged 172 countries and, if working 80 hours a week doesn't prevent it, hopes to win the Receiving Section of

the 1948 BERO Contest. Eric supplies the following DX QTHs:—

ZS9D—14, Francistown, Bechuanaland, U.S.A.

W9QZ—U.S. Naval Station, Pago Pago, U.S.A.

AR2LD—Beirut, Syria (QSL via A.R.R.L.)

C21A—Monaco (QSL via A.R.I. Milan).

V8PET—Oman (QSL via R.S.G.B.).

V8QD—Qatar (QSL Signals R.A.F. Station, Sharjah, B.R. Forces in Iraq).

MC1A (VMC)—Benghazi, Cyrenaica (QSL via R.S.G.B.).

AP5B—Labore, Sakistan (via R.S.G.B. or R.S.H.A.P.O.).

VO2AT—O.P.O. 863, care P.M., New York City.

Thanks for your ever-welcome items, Eric, and give away those long hours of duty for, as you say "Ben takes the lion's share." I hope you will be with us in the 1948 S.O. Marsalis Ave., Dallas, Tex. The U.S.A., makes an unusual request. He is desirous of receiving QSL cards from Short Wave Listeners in other countries. We wish him well.

NEW SOUTH WALES

The March monthly meeting was held on Thursday, 25th, with John Mayle (VK2JU) in the chair, and the business was to consider the Federal Convention agenda and to advise the Division's delegate as to his voting at the Convention. The fact that all 61 items were dealt with in one evening, and of two or three meetings in some previous years was accomplished due to John's able chairmanship, and to the spirit of the members present. The tendency to start petty arguments on minor and irrelevant points was noticeably absent, and no doubt left for Melbourne on the following Saturday, to be advised of members' views on the matter before the Convention.

John Mayle was the N.S.W. delegate this year, but held AT5 ready for something or other. He pre-war Ham, arrived in Australia in 1939, is present QRL with h.w. work and Murchison relieves his gear operating on 50 and 144 Mc. Next tour will be to Ypres where 2TA and 2TC are busy on 50 Mc., but little news regarding results to hand. Ham heard occasionally on low frequencies but seems to know little about them. He says "Mc. Like" more about you Ross. Wollongong promises, I believe, an Amateur Radio Club also already four chappies are over the worries of A.O.C.P. 2MT is active and 2WY I believe is under way. 2OY heard for short periods last night. Do believe you will have to have some QRM from a new Ham very shortly. That's all chaps. Any news of your doing will help considerably.

member who happened to be in Melbourne at Easter, and it is felt that this is not the best arrangement; ideally the position should be filled by someone who is prepared to act as a Councillor for the following year."

As a parting shot, your scribe is again appealing for articles, technical and otherwise, for publication in "Amateur Radio". To date, the response has been nil!

SOUTH COAST AND TABLELANDS ZONE

2PI was heard on 7 Mc. c.w. Big consists of 6WV crystal, 878 in parallel with 60 watts input. S.A. 144 Mc. Modulator under way, using antenna tuner. 2TV, 202S is QSL via 50 Mc. Has worked 2PN and 2TA on that band using a rotary beam. Heard working 2CM cross band 3.5/7 Mc. 2JQ (the Voice of Crookwell) heard often with good solid power. Daughter Betty also interested in Ham Radio, been trying to interest the technical side of things with A.O.C.P. as 1 priority. Monty was heard working VK1AA. 2AAK has been holding sway in City of Plains and was heard from 2NS and 2IE. Has hopes of a.c. also active. AT1R1 with 813 final, modulated by 511A. Receives 2100 tube super. Windmill antenna and power generated by petrolic engine, mostly ZL6 with brother Les, 7LT.

2OW is amongst the 7 Mc. boys using a No. 11, half helical AT5 ready for something or other. Is pre-war Ham, arrived in Australia in 1939, is present QRL with h.w. work and Murchison relieves his gear operating on 50 and 144 Mc. Next tour will be to Ypres where 2TA and 2TC are busy on 50 Mc., but little news regarding results to hand. Ham heard occasionally on low frequencies but seems to know little about them. He says "Mc. Like" more about you Ross. Wollongong promises, I believe, an Amateur Radio Club also already four chappies are over the worries of A.O.C.P. 2MT is active and 2WY I believe is under way. 2OY heard for short periods last night. Do believe you will have to have some QRM from a new Ham very shortly. That's all chaps. Any news of your doing will help considerably.

NORTH COAST AND TABLELANDS

2OE building 3.5 Mc. rig for the winter, 807 p.a. 2FN home for Easter was heard on 7 Mc., gremlins took over rig during his absence. 2SH active

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his new QTH; has been on from the main rig. 882 putting out 12 lbs. sigs on 7 and 3.5 Mc. since putting up new sky wire. 3AL1 on holidays, and portable with receiver. FS1000 portable put up 12 lbs. sigs. 3AHK is QRL on farm, but does not keep him from the DX band, nice work Ossie.

3LY works 2Ls with his low power. Len puts down quite a lot of listening on 50 Mc. 3PR puts out 88 and 9 sigs with a Type A Mark III, cathode mod with a 867. Ron busy on 4 Mc. rig. 3AKO has been making an appearance on 3.5 Mc. and 10 Mc. 3ABH was active on 3.5 Mc., and has got a receiver going on 50 Mc. 3CI has been very active on 30 Mc. Syd goes portable and frequently works VK7s. 3LVS and 3V1 are both very active on the 50 Mc. band. Grant and Rex are getting some nice DX on 28 Mc. 3H2 without very QRLs, it does not stop him putting out 12 lbs. sigs on 50 Mc. Murray also manages to get into the Zone hook-up. 3DL active on 50 Mc. also, Jim has just erected a 3 element beam for 20 band.

CENTRAL WESTERN ZONE

Had a very interesting letter from 3FA, a week or two ago. Brian had been reported on approximately 4720 Ke, around Melbourne way, and as he operated on 14 Mc, easily at the time, smelt a rat somewhere. The transmission was on 14 Mc, 7 Mc. receiving antenna which was rather close to the transmitting antenna. The feeders had broken on close during a windy spell and left the wire free. The wire resonated at approximately the third overtone of the 14 Mc. rig antenna on mostly 14 Mc. Brian found a wasp was absorbing about half his power, and at the same time he was not getting out as usual on 14 Mc. The moral of this of course is for the boys with multi-antenna set-ups to be careful as nobody was more surprised than 3FA when I rang him up.

Round the Zone there has been an outbreak of electric 3ABHs. 3PR have just installed electric's, and as Jim remarked, ceased to be rock-bound; just stay inside the band boys. 3DL also has a minor headache with a 3RS receiver just to hand, spent four hours the other night re-wiring the filament for 42 volt operation. 3H2 is still at his windmill farm on 14 Mc. and as far as the tower is already and also the fixings for the antenna, Allan's main trouble is now family QRM as to where the tower will stand.

Like 3YW, 3ATR was bitten by 50 Mc. wogs. He has made up a 954, 6A07, 954 converter; heard nothing, put in a 28 Mc. mod and had lots of fun putting together a 3Lc. transmitter and V beam. 3ATR is also moving the gear out to the farm to get away from the line noise in Warzackabeal.

The hook-up on Sunday morning, 11th April, went off as well as 7 Mc. would permit. We were pleased to welcome VK3XH into the hook-up, for him to bring along his two young children. Ben also reported a newcomer to the Zone, 3AHM, of Serviceton, who hopes to be going at least in time for the next Zone hook-up. We now have a station at our extreme Western boundary, and will be pleased to contact you on behalf of our newcomer was VK3WQ, from Melbourne, who had a busy day.

The going generally are asked to keep in touch with their stations in Melbourne, planning a special distribution of disposal items not normally on the sevens, so keep in touch chaps. Don't forget the next hook-up on Sunday, 9th May, 10 a.m. 7050 Ke. on the band, and the same list for 3.5 Mc. as it's always good down there. VK3WQ's telephone number for information (if any) is Shawell 321 during working hours, otherwise 299.

QUEENSLAND

At the Council meeting held on the 10th April, the question of Student Classes was raised by Mr. Stevens, the Associate Members' representative, and it was decided that the time was ripe for the introduction of the classes. The question has been explained before, is dependent on the Institute requiring a permanent room, and in this direction a gleam of hope has arisen, and next month we hope to be able to tell you a good news-woe. In any case, it is felt that the Class Officers and manager under existing conditions, and accordingly they will be started the first Friday after the next general meeting which falls on the 30th April. Theory instruction will be instituted as soon as possible, and in this connection, we would be pleased to hear from any members willing to undertake the position of Instructor. The position will be advertised in due course, but there may be someone in our ranks who would be happy to take the job on. The task is NOT a voluntary one, if that's any incentive!

The new Council has settled down to its job with a smoothness that augurs well for the future. Frank is in the capable hands of Mr. Bill Roff (4SWY), the leader of the third, already shown, is surely descended from that thrifty race the Scots—or am I sticking my neck out? The only member of the gang who is somewhat unhappy about his job is the Librarian. Bill (4WF) has very good reason to be unhappy, as the library, which is his, has been a dismal failure, despite the conscientious efforts of the Zone managers concerned. When—ahem—when the books are already out again, the shelves will start filling up again, and we have no desire to conceal the fact that the Library is at present not worth the effort and if the hoped-for response is not forthcoming the whole caboose will be abolished, despite the screams from the inevitable minority of offenders. More talk—PH has my book yet, but there it is, fallen, and then back or else.

The disputed equipment secured for members at the sale held in March has been moving off fairly rapidly, the accent being on Command receivers, notably of 6.9 Mc. range, and also on the same line transmitters. One particularly good buy in the opinion of your secretary is an AERL receiver which, although only useless in itself, contains an assortment of really good tubes, namely three 6AK5s and half a dozen 9400s and a 12A6, besides a useful handful of resistors, etc., which, contrary to most of the aircraft gear, can be lifted out without doing damage with the soldering iron. At the time of writing, tuning units and Command transmitters are still in fair supply.

Delegate 4FN returned from the Convention in one piece, despite the fact that swords were drawn once or twice between Frank and the bandit will in the South. A special meeting of Council will deal with the reams of literature which Frank has brought back from the Conference table. Council sat until 11.15 p.m. last Friday dealing with routine business, and then left very early indeed, after anything starting with "C" excepting possibly coffee, so a special meeting was convened for the following Friday.

In common with the sentiment in other Divisions, Queensland was surprised to learn of the extinction of "Grenville," and widespread approval has already been expressed regarding his re-appearance. "Grenville" did so well in 1947, particularly in getting the hand of the public, and, unless their calls as an aid to business ends—stickies ends we hope to the offenders. You have probably seen the letter from the R.I. on the last page of April "A.R." If not, have a look right now. It's not only yourself that might get into trouble, but the practice is bringing discredit on Hams in general.

Last year some bright spark (and we're not being funny) thought of the idea that the VK4 Division should run a stall or Exhibit at the Annual Royal National Show. This was too short to do anything about it then, and the spark was extinguished, we thought, but it's been blown into life again—some spark! Council thus proceeded to try and kindle the flame. I hereby place the old neck of the bottle for the first band and I sincerely recommend that it can be done. To revert to the style befitting of a Sub-Editor—Amen—it is a fact that the question was explored very thoroughly, and it became obvious after hearing of the experiences and difficulties besetting business enterprises with the idea of running an exhibit that the VK4 Division should run an Exhibit, much as we would wish to. Rest is colossal, electrical installations cost lots of dough, and then there's the small matter of staff. The only way would be to know somebody, and we don't know a soul.

The Field Day bag has bitten a few of the boys and what with balmy winter sunshine and all that we thought it was about time we had another. When 144 Mc. poked its head up it looked as good as excuse as any to have the band broken down for the first week-end in May, and the band was officially ours. Although a v.h.f. set-up was at first proposed (it's a funny thing, but Council always seems to consist of v.h.f. blokes), the thing has been widened in scope to include the "v.c." band as well. For the benefit of the ignoramus, "v.c." bands are low frequency bands. Details are as follows as the show will be over by the time you read this, but trophies of some sort will be awarded for the best performances on 50, 144 and 210 Mc. and the frequency of the best show of operation will be 1600 hours Saturday, 1st May, to 1600 hours, 2nd May. If the wide interest already shown is any criterion, everyone will have a grand time. Amongst those going out will be 4DR (4CU) to Mt. Kynock, Toowoomba; 4KP to Pt.

Danger or Springbrook, whilst 4ZU and 4XG are going to the Maleny Range.

The gang are quite enthusiastic in their comments on the new Membership and Contest Certificates, samples of which have arrived. Council is to those responsible for the adoption of such a fine design and selection of colour. We feel sure you will all be proud to have these for wall paper, and at the moment all we can tell you is that enough have been printed to cater for all requirements, and distribution is proceeding.

SOUTH AUSTRALIA

The notes this month are prefaced with an "apology for the lateness of the same." The reason being that I have been on annual leave and naturally left the notes until the last day or so. All would have been well, however, had not fate

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complained to send to Adelaide and its suburbs a first-class hurricane, something unprecedented in the history of South Australia. The consequent damage to amateur shacks, equipment, aerials, etc., etc., say nothing of the interruptions to transport, communications, and public utilities has left everybody feeling like a limp rag. The scrub natural-ally fell to the ground in blizzards, and we have been unable to get any electric light for three nights. I have been washed out of my shack, and believe it or not, in this year of our Lord 1948, I am attempting to write these notes beneath the feeble glimmer of a hurricane lamp.

To fill my cup of bitterness to the brim, I have just been informed that Mrs. Barber (the XYL of 5MD) is looking for my blood for writing a paragraph regarding the dirty dishes in the sink upon her return from a shopping trip. She has come to the conclusion I have to apologize, and to my shame that I have checked up on my source of information and I find that the said paragraph was indeed a libel, and I offer my sincere apologies. I find that the kitchen sink was definitely not full of dirty dishes when there was still room for a few more! Having said, I feel some honour restored to Mrs. Barber's good books by my abject apology, I can attempt the compilation of these notes with an easy conscience, so here goes.

The monthly general meeting for April was held at 17 Waymouth Street to a capacity gathering when Mr. W. O. Gibbord gave a very interesting and instructive lecture on "Carrier Transmission". The lecture was very well received and a vote of thanks was passed. Dr. D. C. Muller (5VM), was welcomed with acclamation by all present. Among the visitors were Messrs. Opie, George, Turner, R. Torrington (3TJ), J. D. Nourse (2DQ), and Graham Pitt (5OP).

Ross Harris (5FL) spoke on disposal matters and Hal Austin (5AW) discussed the recent conference held in Melbourne. The meeting was then closed with everybody having spent an interesting evening.

Rex Harris (5RR), who has been handling 5W1 so capably, tendered his resignation from 5W1 which was accepted with regret, and in future Hal Austin (5AW) will be in charge of the W.L.A. Sunday broadcasts from his QTH at Ross Park.

Reports of the hurricane damage to amateur constituents to come in and the latest list shows that 5MO, 5RX, 5RS, 5XO, 5LD, 5AJ and 5LW are a few of the Hams minus a skywire.

A Naval Frigate, the "Barcoo", was washed ashore during the aforementioned hurricane and had to be moved on to the QTH of 5LPS. I wish to deny the rumour started by 5LW that 5PS was chased up the beach for a couple of miles by an irate signalman from the "Barcoo" because he tried to talk the said signalman into selling the radio gear aboard as disposal equipment.

Noted that Cee Raseby (5BZ) was absent from the general meeting, apparently was stoking up the water cooled job preparatory for a session of DX. "The rumour that he has joined the ranks of the truck drivers on the road between Melbourne and Adelaide and is known as 'Raseby' to his conferees on the road. With a smile on his lips and a curse in his heart, he lets nothing pass him and always gets his truck in on time."

George Ramsay (5GD) is reported on the sick list with a very heavy cold, in fact at one period applications were made in the road to cover not I hear, and probably next time he adjusts his beans in the cold chilly air he will remember this bout of sickness!

Joe McAllister's enthusiasm for the W.L.A. led him to rise at 4 a.m. on Sunday, 14th March, with the intention of visiting the local Hams at Kadina and passing on the Institute good wishes. Leaving at 5.15 a.m. Joe, the XYL and the harmonics had a very pleasant trip in the brisk morning, and as there were no decent stations at the time of the visit, was set so as to hear the 5FL back wave. The first call was to Darcy Hancock (5RJ), but a notice on the back door "no milk today thanks" told its own story. Anyway, after making a few enquiries, the abode of Les Wallbridge (5UX) was found and he was most hospitable, and invited Joe and himself and his XYL about to depart for the trusty van. Joe was right royally welcomed and over a cup of tea it was suggested that as there was a bit of a do over at Crystal Brook, what about all going over and meeting the other Hams. Having listened on the "5UX" receiver and not heard any VK5 signals, the party started for Crystal Brook.

The first indication of "CB" was the huge aerial mast of 5CK (one of those common broadcasting stations). Passing through the town the party came to the creek bed, near the showgrounds and found a party of Hams gathered, including Len Muller (5VM), C. A. Dodridge (5CD), H. Hodges (5AP), and quite a number of unidentified personalities. What with YLs, XYLs, harmonics, and visitors it was a grand gathering, and lunch took a long time because it is hard to talk and eat too. Joe passed on all the Adelaide gossip, and made a note of all the country doings (for which I thank him). Len Muller (5VM) took a photo of the gathering with his huge camera (tripod, red cloth and all) giving quite a toroed act with the red cloth, with the evident idea of making the gang look pleased. How successful he was we will only know if we see a photo, so what about it Len?

The next visit was to 5OK to look over the various interesting pieces of equipment installed there. Then the party went to the shack of 5VM and Len has a fine set-up, rack and panel style, but what intrigued everybody so much was a complete shower over the rig. Apparently Len was in such a hurry to get on the air that he forgot to dismantle the bathroom. Anyway it makes an extra good water cooling system (5BZ please note). The day was now drawing to a close and Joe was amazed to note how the time had flown. A little trouble with the petrol feed delayed the departure, but some soap and a little rag soon fixed it up OK. The lights of the city were sighted about 12.30 a.m. and some 21 hours had passed by in an incredible short time. Joe and his XYL plus the harmonics, wish to thank all the folk who helped to make the day such a happy one, and they all hope that it will not be long before they all meet again. The fact that Joe set out to do a trip of 180 miles and finished up doing 260 miles speaks for itself. The benefit to the W.L.A. was enormous, as it shows the country members that he means as much to the Institute as anybody else, and Joe is to be congratulated on his foresight and enthusiasm.

A new receiver is under construction at 5RJ although if the conditions are always as bad as they were on 14th March, more than new receiver will be wanted to pick up any VK5 signals. Stop Press—According to reliable information two or three magnetic storms in parallel were centred around Kadina that day. No wonder conditions were bad.

Have heard a rumour that Roy Cook (5AC) is due back on the air shortly. Roy is one of the real old-timers, and we all hope that the rumour is correct. Haven't seen you at the meetings lately c'm, what about it?

5FL has a new c.r.o. hooked on to his receiver and this, plus his Bendix frequency meter, enables him to hold all the trump cards when it comes to honest reports etc. Some of the Hams take the advice well and others don't. The don'ts are passing rude remarks about the 5FL back wave. Personally I am neutral.

No doubt about those school teachers, everything must be so exact, or else. Heard 5RY and 5XU in contact the other night and after Dougall had given Gordon his report three times, Gordon asked him again and Dougall finished up spelling it, SEVEN. Then and then only was 5XU satisfied.

The Police Commissioner has acknowledged by letter his appreciation of the splendid assistance rendered by Amateur Radio as a means of communication during the recent bushfires in S.A. Ross Kelly (5LW) was the recipient of the letter (his second by the way) but Ham Radio also secured

some useful publicity, and our thanks are due to 5BZ and "Doe" (5MD) for their fine job.

5BZ is in the process of constructing a 144 Mc. transceiver and as his QTH is Somerton, he will be welcomed by the northern suburban boys as a choice bit of DX.

5LW is looking for a cheap windmill tower so as to be able to lift his antenna to 28 Mc. standard square higher in the air. It is doing quite a good job almost on the ground that Jack is wondering just how many db. points above S9 he will get when it does rise into the air. Anybody able to give some information as to the availability of a cheap tower

It is not often that a nickname becomes a fact, but "Pop" Deane is the exception that proves the rule. The name "Pop" came from the fact that Launce (5LD) once upon a time had a voice as low

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in pitch as that noted film character "Popeye" the sailor man. The arrival of a harmonic (a bouncy bouncing boy) to the 5LD domain made the "sailor" quite in order. The amalgamation of Mr. and Mrs. Deane. In this way it was just a coincidence that "Pop" parked his car next to 5XU at the recent field day. (Sorry Gordon but it was too good to let pass.)

You will theorise that I had forgotten "Dove" didn't you? Well I haven't. I believe that he is using tooth-brush handles for feeder spreaders. Take my advice and lock your bathroom doors should he visit you, and don't fall for that sales talk he will give you about that "so and so look," "smile and such smile." It is our method to get a disinterested tooth-brush in favour of a new one, thereby permitting him to "bite" you for the old one.

General opinion regarding the "Gremlin" in VK5 is that whilst it is a useless creature, the VK5 Committee to handle the creature as they think fit, it is generally thought that a mistake has been made. "Gremlin" was doing a good job and it was better that he remained anonymous and the opinion of a few thin-skinned Hams should not be allowed to sway the VK5 Committee's better judgment. With the present influx of "Gremlins" to be late Amateur Radio something in the nature of "Gremlin" is required.

To anyone who has attended any meetings or club gatherings where amateurs get together "ringing" with infinite enthusiasm, it is becoming increasingly noticeable that the present methods existing at W.L.A. meetings are falling into disfavour. I refer to the "introduction," "lecture," "general business," and then a few minutes for a get together before leaving for home. Whether we like it or not, the present methods of W.L.A. meetings are divided into two classes. Those who know as much about the subject as the lecturer and therefore are not interested and those who do not understand the lectures and therefore are also not interested. The remaining few who are interested are in a small minority and they do not count. This does not hold for all lectures, now and again we get one out of the box and everyone is more than interested, but it is becoming an obvious fact that if we are to hold members interested in W.L.A. meetings we must give them more time to have an informal rag chew, more time to get together and make each others acquaintance, in short, make the meeting less like a gathering of Bachelor of Radio Engineering (5LW please note) and more like the gatherings which take place in the "old days."

What's that you say, how can we do it? Don't ask me brother, I only write the notes! Seriously though, gang, haven't I got "something"? If you don't think so then get up on your feet and tell Committee members, the next general meeting, Council is only in office to carry out the wishes of members, but if you don't state your wishes on the floor of the meeting how can the Council carry them out. They're not very mind readers as yet. I had the pleasure this morning of attending the annual meeting of the HoldFast Bay Radio Club held at the Glendal Town Hall. When I first arrived at the Town Hall there was a steady stream of people all making for upstairs, and I followed them like a lamb, mentally telling myself that these Glendal people were certainly know how to attract a crowd. Imagine my surprise upon arriving upstairs to find that I had come upon an anti-communist meeting about to commence. Somewhat embarrassed, I crept downstairs, followed by about 700 pairs of eyes all focused there and me. I had to leave him the "ringing up." I crept to the rear of the building and there came upon a chap with a "QST" in his hand also looking a bit bewildered. He introduced himself to me as 5RS and said amiably, "I say old man you're Doc Barber aren't you?" The look of him was most impressive as my face apparently staggered him. However he stepped back a few paces and said in an apologetic tone of voice, "I'm sorry old man, but you do look a bit like him." In a tone of voice that I use when handling raging lions, fierce tigers or

ANNOUNCEMENT

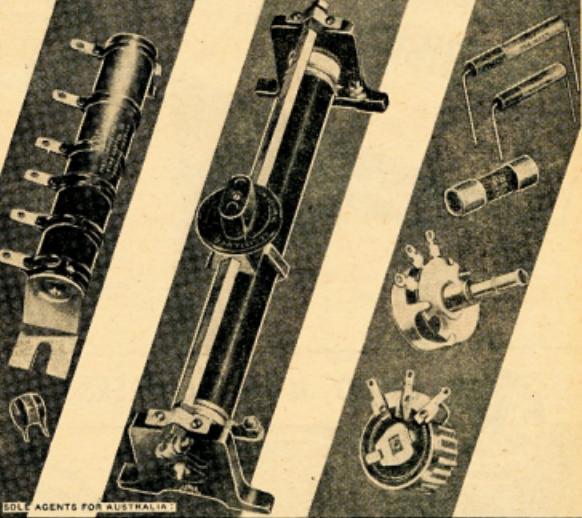
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H.F.P.

perhaps my wife, I introduced myself and was somewhat mollified to have him say, "Oh yes, I know you're the old man." I said, "That's right, I'm the old man." So I went along on that trip for the Magazine. I regained my lost temper at this charming flattery and we both adjourned to the room at the rear of the hall, which by now was a blaze of light.

Among those present I recognized were SCB, 5AF, SJE, 5KZ, 5BZ, 5BZ, 5PR, 5KZ, 5XG, 5XG, Charlie Brimble (5CB) the elected President and Ted Cawthron (5JE) was Secretary. Being the first meeting of the Club naturally a good deal of preliminary business had to be completed, and when I left at 10:15 p.m. to catch a bus nothing definite had been decided at. One thing was decided, and that was that the club was not to be a break away from the W.L.A., but was purely an endeavour on the part of an enthusiastic gang of Hams to try and give to Amateurs as a whole a place to meet informally, to work on a group basis, help would-be Hams along the hard road to success, to have a social gathering occasionally, and all in all provide that friendly atmosphere which they all definitely agreed was unfortunately lacking at a W.L.A. monthly meeting.

I took a little of their time to explain that whilst I was in sympathy with their aims, it was extremely difficult to achieve the results they were seeking at a W.L.A. meeting. Nevertheless I wished them luck and promised that any publicity or help that the W.L.A. could give, would be willingly offered, and if anything counts for anything, then the Holdfast Bay Radio Club is in for a very happy and successful time.

WESTERN AUSTRALIA

The April meeting was held at the Builders' Exchange, 66 St. George's Terrace, on the 12th. There were over 60 members present and a cordial welcome was extended to two new members, VKEAW and VKEKNW. G4MBW was a special visitor. Mr. G. Moss gave information on the W.L.A. convention held during Easter in VK3. All but two of the VK3 suggestions were approved. We are very grateful to VK4GM, for the manner in which he presented his ideas and hope to see him occupy the same position again.

"Gromlin" was discussed to some measure by the meeting. Such a division of opinion existed that VK6KW suggested a poll be made of VK6 members as to what the general feeling of Amateurs in this state was to the receiver this year by the Council. The motion was approved and the outcome will be known by the next meeting in May. A transmitter has been bought by the Division to be given over to commission as VK6KW to do the W.L.A. business on a transatlantic basis. Its installation will be at the QTH of a Council member who will make the broadcast, and so make his own rig quite independent, and re-builds will have no time restrictions.

At the conclusion of general business, Mr. W. Petersen (6LW) gave some interesting facts and figures on v.h.f. antennae. His remarks dealt mainly with corner-reflectors, their advantages and adaptability to v.h.f. equipment—particularly the SCR522.

Coxon (6AG) gave an instructive demonstration on the loading effect of parasitic elements on the driven element in multi-element directive antenna arrays. This demonstration was the ideal "follow-on" after 6LW's more theoretical approach to the subject.

Hugo (6RE) and Mr. Rumble (6RE) went to considerable trouble to demonstrate the SCR522 modified for use on the new 144 Mc. band. The two complete units were set up in the room, and a 1.5 KW two-way QSO was the result. Many 522 owners were interested in this particular demo. It is a pity 6KWW burned out on that new meter!

Mention was made on the commendable effort made by 6FA in working regular steaks with the Heard Island Expedition—Antarctica. VK3ACD has been heard on 144 Mc. but his five watts are very often barely QRD. VK3ACD hopes to be running 50 watts input before long now.

6WT has taken over the duties of Sub-Editor for "A.R." and would appreciate ideas for the compiling of these notes.

PERSONALITIES

6FA heads the team of his contacts with Heard Island Expedition. New work 6DK. 6GA is heard talking about 28 Mc. beams. All the gear is on the ground and waiting to be tossed into the air. 6VZ, another member of the Carlisle gang, is working on a 100 watts unit for his v.h.f. carefully. 6RS has his big dipole in, and is making some DX demonstrations from 6VZ who shows anyone just how easy it is to work c.w. DX. 6SA will be visiting VK3 and VK5 soon and will be "full bottle" when he returns. What's the latest Jim? 6SN has been quite active, and has worked some 14 Mc. phone DX. Want a new antenna? 6F7's SRU has not had the rig on the air for a whole

week. What's happened Jim? 6JW brought VK2VC 'round to the shack to show them off. Vin likes our weather better than GMV does. 6VZ has got a signal 20 db over 89 SSB. What is it? 6M7 has disposed of the W.L.A. SCR522s and did some f.b. work with circuit diagrams. Wally is glad the Class "C" Wavemeters have their circuits under the lid. 6ED has picked up the rig and seems to have some new ones. Neville. That trip to America must have done him.

6WZ, we haven't heard Harry lately. His new Club must be keeping him busy up there. 6EL had a weekend of 7 Mc. On other bands it's 6EL. 6VX is still here. 6VZ and 6M7 are coming to Perth on a holiday with 6EL. Will be looking forward to meeting you Cyril. 6VW has got the idea of rhombic antennas and works Chagos Islands just to show it works. How many countries now Ray? 6ZG is a former member of the Heard team. 6VZ and 6M7 are here. 6VZ is looking for a boat to head up. 6M7 has been looking for 6RT, but has not heard Len for ages. What's his cooking Len? 6FB at Millicent still persevering to work interstate on 50 Mc. Me.

6LW is back on the job again after a visit to VK3. 6FD is heard more frequently again now. Jimma has been too shy to do much operating while 6DK was away. 6WG and 6HT heard regularly in Perth, but they don't say much about their activities down there in Albany. 6CM works nice DX and 28 Mc. 6VZ is getting into the boat scene. 6FL and 6HL were there from South America easily. Shows what good beams can do. 6WH still has the usual 16 db. signal on 7 Mc. Ted is thinking about 50 Mc. too, and wills 14 and 28 Mc. to the DX bands.

6ZG hasn't been heard lately. Maybe the port is going rack and panel style.

DX OF MARCH BY VKEGRU

Both bands during the past month have settled down to more consistent habits and on the whole 28 Mc. has been better than the few preceding months have shown. 14 Mc. was somewhat spasmodic later in the month, but nevertheless some good QSOs resulted.

With winter near at hand, daylight operation on 28 Mc. is more evident, particularly close skip operation, and it's nothing to hear the VK3s, VK8s, VK9s, and up to at least as 1900 hours daily and later.

28 Mc. Phone, Europe.—This continent as usual has provided most of the DX and usually the Gs have been most dependable and are always there at the right frequency. The Gs worked from the old country being too numerous to mention. The rest of the Europeans worked were GM2YAA, 3XH, Scotland; GW422, 2R8, Wales; 11HV, 11B, Italy; SM3ZF, 5VW, 5PR, 5PL, Sweden; E18J, Eire; FSP4, SAT, France; ZB1AC, Malta; PA0FB, 000, 001, 002, 003, 004, 005, Finland; LA4B, Norway; ON4UVA, 4BG, Belgium.

Africa.—The ZS signals have been in the majority amongst the Africans coming through and quite a few calls have been heard and worked this season. Some of these boys who like getting up early on Sunday morning to work the world have been heard from here at 1300 hours (0700 South African time). The Union boys have also had a good time this last working month—ZL4—their hardest country to work—just like South Africa from VK6! VQ5PYE, Transvaal; M12Z, ZL2Z, ZL4Z, and lately M12ZJ has put in an appearance and the recent newcomer; ZE1JH, 1JB, Southern Rhodesia, were two new ones added to my ZE; ST2CH, Khartoum, was the only North African worked. It is believed that ZD4AH, Gold Coast, is more consistent on 28 Mc. now but so far has not been heard.

Asia.—One item of interest to hand is that Pakistan now has its own prefix, that being AP, and a few of these fellows are heard amongst the host of European signals. M12ZP (ex-VU2QV) who uses 71 bands and has been the most consistent; VU2QV, AR5AH, Lebanon on 28.5 Mc., is quite a good signal most week-ends—she QSLs every contact as I have three from him so far. HL1AQ was an interesting QSO from Korea. Apart from a number of JEs worked, XZ2HN (Burma) was the only other one heard.

North America.—With the W-V-E phone test finishing in March, one didn't have to call CQ too often and quite a number were worked. The Canadians were VETACV, 7EL, 7NV, 6GI, 4BBI—the latter being very seldom heard here for some reason on other bands.

South America.—VY1NEP and TG9JK in Nicaragua and Guatemala respectively were the only contacts with this area.

Others.—The ZLs have for most of the month had signals like locusts in VK6 from early morning

until late afternoon and many new QSOs have been made together with many old friends from this time last year. The Hawaiians were worked in KH6LD and last week VKEW/KH6.

14 Mc. Phone, Europe.—A few occasions at night have produced some interesting QSOs with this continent, and also of an early morning quite a few stations have put in good signals. DA4YO, Germany, was one of the strongest signals heard this month and he made a really good contact this morning; U25KZW, ITALY (worked 0630 one morning); UB5KAD in Kiev, Ukraine, was my first Russian worked on phone and proved interesting; F3OC, France; ON4BG, Belgium; DE1U, British Zone in Germany, were others worked.

Africa.—A few ZSs have put in an appearance in the later evenings; ZS2F providing a new country—I've been looking for a ZSs for two years.

ZS5DF, a YL operator, made a very interesting QSO.—Others from this continent included VQ4KTH, Kenya; ZE1ZK, Southern Rhodesia; E18E, Ethiopia; VQ5AE, Mauritius, and VQ5AB, Chagos Island (another welcome new country).

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Asia.—There are still plenty of Asiatics around with the team turned north particularly VSI, VS2, C. J., VU, ZX, etc. Three of note worked were ZG6JM, Palestine; AP4A, Pakistan, and VS6ET, Oman, on the South Eastern portion of the Arabian Peninsula.

North America.—We are getting more and more reliable during early and late evenings and during their recent contest many numbers were swapped during one week-end. A few Canadians were heard but none worked.

South America.—Only one contact—YV5AY, Venezuela.

Central America.—These chaps have been rare lately and the only two heard were both worked. XET1Q, Mexico, and CO2BM, Cuba.

TASMANIA

Here is Tasmania once again with a summary of the doings for the last month or so. The April meeting was well attended and the report of our Convention delegates (TBL) was reported. Apparently the aforesaid conference was almost a marathon effort of chin wagging, however plenty of good work seems to have been accomplished.

Another field day is set down for the end of April and if the last minister is any indication it should be a TBL affair. TXA is scheduled to hide his transmitter. This will be the last field day for the season.

Now for some personalities, YVY (Bill Watson) has departed from this fair isle for a warmer climate, to wit New Zealand and was presented with a plaque inscribed with "Tasmania". All look forward to hearing his back on the air under the call of YVY. TBL has had his receiver in bits to incorporate band switching on a couple of bands. Had a look at TBL the other night and he has a shack full of nice looking gear, floor racks and the trimmings. TBL puts out some nice phone mauling 7 Mc. TBL and 7 IRB in the northern end of the island come in here down with plenty of punch and seem to be working plenty on 7 Mc. Heaven knows how with the mess that is on 7 Mc. these days.

TOW and TNC are mostly on the higher frequencies they must have patience, those guys, waiting for 50 Mc. stuff to peke its way through a hole in the jolly old ether. Col Wright (CLZ), our northern councillor has been in Hobart for a week or so and was present at our last Council meeting and general meeting. The Convention is set for the weekend of April 8 until 12 p.m. with TBL and getting him the floor most of the time—must try and get him a nomination for the next parliamentary election.

We understand that TBL, who is at present in Melbourne, has been put under the dog house for arranging a residence for the duration of his stay. What a sentence! Have heard a couple of new call signs in VK7 lately, must find out the names of the owners. The Institute in VK7 is going ahead by leaps and bounds, and it is hoped to bring the membership to 100 before the end of the current year. Now, what's the point of these new signs that are listed, yet one never hears? Well you chaps, about as sneak out of your transmitters now and again!

The local A.O.C.P. class has about a dozen starters this year and all are keen, so it looks as though the QRM in Hobart is going to be something to cope with in the future—still, the more the merrier.

VKSPD, working portable in Hobart, seems to get among them on 7 Mc. and one can that guy talk! On 7 Mc. one hears 7DW and TBL and a few more regular, e.v. mors and now your chaps don't happen to know more keys can be bought quite cheaply ex-army disposals.

NORTHERN ZONE

It was fortunate that TBL should be in Hobart at the time of the Council and general meetings particularly so as our able (and willing) Secretary had just returned from the Convention. The general outline of this Convention will be conveyed to all members in due course, possibly even before these notes are read, however, should any more information be desired by any member from this Zone, I will be only too glad to give them any more details if it is necessary.

This zone shows the advisability of having a periodical get-together to discuss items of mutual interest and I think that if enough interest were shown by individual members a meeting night—possibly once a month—could be arranged.

Mr. G. J. Maher, of EX, an ex-army man and a member of the I.R.E.A. has made arrangements with their secretary whereas when any subject of interest to Amateurs is to be discussed at their meetings, this Zone will receive an invitation through our Councillor to attend such meetings. The first of these meetings to which we are invited takes the form of a picture night at which four films on television

CORRESPONDENCE

Box 52, Leongatha.

Editor, "A.R."

It is with pleasure that I note that "Gremlin" is returning to the "air" and it is to be hoped that his efforts in future contests will have the desired effect of clearing up some of the rotten signs and operating heard on the "Ham" bands, particularly 7 Mc.

The letter of Don Knock (VK2NO) in the April issue is worthy of consideration by every Ham in the U.K. That evening I was near my kitchen table on this band (7 Mc) and it is time something was done about it. I think if phone was prohibited on this band after 1800 hours, either by regulation or as suggested by VK2NO, a gentleman's agreement, plenty of good contacts could be made in c.w.

For those who must rag chew to their neighbours on phone, and in addition put the XYL and all the family on, why not use 50 Mc.? This band could be excellent for local QSOs, while the 3.5 Mc. band could also be used. As one who uses the 3.5 Mc. band, I can assure you that 50 Mc. is sufficient for Interstate and ZL contacts. B.C.L. QRM can be cut out with efficient adjustment of the gear with low power. Here is hope for less QRM on 7 Mc. and more use being made of 50 and 3.5 Mc. bands.

Before I conclude may I make one suggestion for the Mag, and that is that it be of smaller size with more pages. The same size as "QST".

—W. R. JARDINE, VK3PR.

XZ2DA IS NOW G3DDN

15 Eynesbury Ave., Lower Mitcham, S.A.

Editor, "A.R."

The majority of VK Amateurs who were active on 2 Mc. during 1946/7 would I think, have moved on to 7 Mc. with Basil Tait, XZ2DA. Basil returned to England some months ago, and in a letter received from him he advises me that he has been demobilised from the R.A.F. and is now licensed as G3DDN. He is operating for the time being on c.w. only, and has a frequency of 14240 Mc., 14140, 14145, 28,040, 28,680 and 31,160 Mc. He is very anxious to make contact with some of his VK friends, and has asked me to give all possible publicity to the above.

—L. THOMAS, VK5IT.

are to be screened. Unfortunately, time in this instance is too short for us to advise all members. This again reminds us of the benefits derived from meeting.

My knowledge of the individual doings are practically nil owing to my visit to Hobart. However I have heard 7RQ on the air using his new Franklin v.f.o. and it certainly sounds as though Ray has produced the goods. Also saw 7RQ in the ware-rooms of the P.M.G. office in Hobart and he said see what's coming up. 7GD was lucky enough to snag VK1AA while Ted was at Macquarie Island. I also QSOed Ted and when he gave me his location I went to the door of the shack and waved to him. I'm afraid this concludes the doings for this month. However, any member of the Northern Zone, I will be only too glad to give them any more details if it is necessary.

This zone shows the advisability of having a periodical get-together to discuss items of mutual interest and I think that if enough interest were shown by individual members a meeting night—possibly once a month—could be arranged.

Mr. G. J. Maher, of EX, an ex-army man and a member of the I.R.E.A. has made arrangements with their secretary whereas when any subject of interest to Amateurs is to be discussed at their meetings, this Zone will receive an invitation through our Councillor to attend such meetings. The first of these meetings to which we are invited takes the form of a picture night at which four films on television

"GREMLIN"

Letters in reference to "Gremlin" expressing their desire for his continuance have been received from W. Burford (VK5PB), W. J. Hartley, J. Coulter (VK5JD), J. G. Haldiday (VK4HZ), V. H. Wilson (VK5W), F. H. Doherty (VK3XE), D. B. Knock (VK2NO), B. Ferguson (VK3PZ).

THE MAGAZINE

P.O. Box 127, Geraldton, W.A.

Editor, "A.R."

Because I feel strongly about things I find myself compelled again sticking my neck out. And I feel an attack coming on right now.

First of all, the material and make-up of our Mag. Mostly f.b.—but inclined to be too astro at times. Articles about "making over" disposals, equipment and about new overseas developments, practical details of antennas, etc., etc. I think the doctor ordered. Those who want the pages of maths, can go subscribe to the Proc. or I.R.E. A.W.A. Technical Review and so on—they'll get more than they bargain for there!

There is nothing wrong about a man having hobbies, but I would like to see a few more of them. Those who borderline exist and endeavour to use Amateur Radio for learning about Amateur Radio—not his job as a technician. Otherwise he is selfish towards those for whom radio is only a hobby.

What is it a printer's error or did 3R2 actually mean that he won't put a transmitter on 50 Mc. till there's some c.w. to work? There should be c.w. (and m.c.w.) on 50—but to make a statement like that in print is to reveal the sort of old-time mentality that gives the new hand a picture of some old dog who has never been taught to walk. Who's wife and kids (if any) in life and lets. Let's have more tolerance from both phone and c.w. men, particularly some of the latter gentry who earn their living at P.M.G. keys and can't forget it. They even when pursuing their hobby of radio, seem to be afraid of some of these pre-1930 amateur 1922 blocks to imagine themselves of aristocracy of handies, immune from the follies of common phony follies, of course, of youth.

Now, re "Gremlin". This bird is so busy wilding his poison pen that I'm sure he never gets on the air. Bill Sherriff (VK5W) says, "This bird, who never makes mistakes never makes anything." "Gremlin" wouldn't be game to go on the air for fear he made some "blue" such as those he writes about in others. However, my main theme where this chap is concerned is not that I dislike Gremlin, but of the way he readily endorses his anonymity. That's not cricket—not Ham Radio. We don't mind being criticised provided we know who's doing the criticising.

—R. H. ATKINSON (VK6WZ)

HARMONIC EMISSIONS

Wireless Club, Treasury Gardens, Melbourne, C.2

Secretary, Vic. Dir. W.I.A.

The Victorian Amateur Advisory Committee is concerned at the number of harmonic emissions from Victorian Amateur stations which are being heard on the 14 Mc. band and the metropolitan area, and has therefore suggested that the institute might be good enough to arrange announcement in appropriate terms during its weekly broadcast to all members through station VK3AWL.

Such action would serve to remind Amateurs of the obligation to restrain harmonic emissions and might do much to assist conditions for other licences in neighbouring locations.

It would be greatly appreciated if you would arrange to take action as indicated and also perhaps to include a paragraph concerning this evil in the next issue of "Amateur Radio".

—L. PEARSON, Chairman,
Vic. Amateur Advisory Com.

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Amateur Radio; May, 1948

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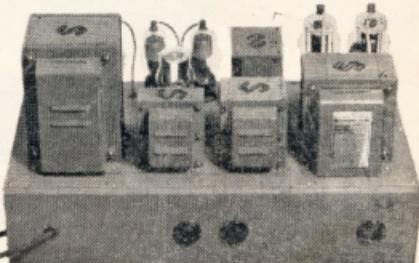
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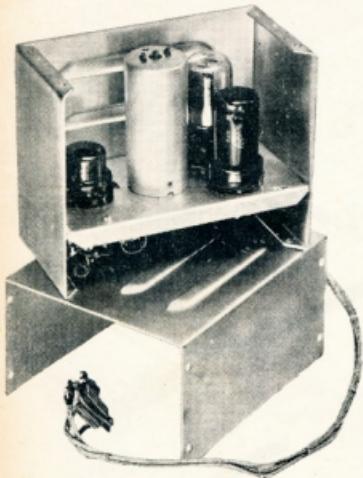


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